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Assisting Psychiatric Nurses in Managing Work Stress and Decreasing Callouts and Absenteeism

Prisca Njume
Walden University

Walden University

College of Health Sciences

This is to certify that the doctoral study by

Prisca Njume

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Mary Verklan, Committee Chairperson, Nursing Faculty
Dr. Casey Cole, Committee Member, Nursing Faculty
Dr. Mattie Burton, University Reviewer, Nursing Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2020

Abstract

Assisting Psychiatric Nurses in Managing Work Stress and Decreasing Callouts and Absenteeism

by

Prisca E. Njume

MSN, Walden University, 2014

BSN, Howard University, 2007

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

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Abstract

Management and reduction of work stress is important in promoting nurses' well□being. Understanding how to decrease stress levels may allow nurses to provide better care, improve patient outcomes, and experience increased job satisfaction. The focus of this project was to empower psychiatric nurses to manage work-related stress and decrease callouts and absenteeism. Person-environment fit theory, job demand-control (support) theory, the job demands-resources model, and the effort-reward imbalance model were used to inform the project. Pretest and posttest data were collected from 61 nurses using the Perceived Stress Scale. Deidentified retrospective and prospective data of the number of callouts were also obtained from the nursing administrative office. The educational intervention was a stress management program used to reduce stress, improve employee well-being, and improve patient outcomes. After the educational intervention, the number of nurse callouts per month decreased from 253 to 51. The t-test showed that the stress mean score before and after educational intervention was 33.57 and 17.80 respectively, and the number of callouts before and after the educational intervention was 3.87 and 0.84 respectively which is a statistically significant difference. The use of effective stress management practices can translate into more positive nursing experiences for the nurse and patient, thereby promoting a better life balance among psychiatric nurses, enhancing their well-being, and improving the quality of patient care.

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Dedication

This proposal is dedicated to my beautiful family for their encouragement, understanding, and support. This project marks the end of a journey started some years back. Thank you, my husband, for always being there, for encouraging me, and for holding me up during this long and challenging journey.

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First of all, I want to thank the almighty God for sustaining me throughout this difficult and challenging journey. Without his mercy and grace, I would not have been able to complete this journey. I am very grateful to my family and friends for all their encouragement throughout the entire journey. I am grateful to my DNP committee members, especially Dr. Mary Verklan, who has been a strong committee chair and mentor for doctoral studies. Thank you for your invaluable assistance and scholarly criticism in the preparation of this work that has guided me to transition from a practitioner to a researcher. Thanks to my wonderful husband and lovely son who through it all have been very patient with me. I am deeply indebted for the gracious encouragement they have afforded me. A very special thank you goes to Dr. Martha Hoff for her painstaking labor in proofreading my project and proposing many helpful improvements. I extend my sincere appreciation to Dr. Shaw-Taylor who has been a source of strength and support from the beginning of this journey. Special thanks also go to Mr. & Dr. Mayer, Dr. Norbert Njume, Dr. Protus Njume, Jacky Mbulle, Ntoge Penda, Rosemary Kwaye, Antoinette Wambo, Paulette Siben, Juliet Ngwa, Patience Musong, Blanche Jam, Titilayo Akinmenji, Christiana Adebiyi, Tiffany Adeyemo, and Maureen Kungaba for their constant prayers, support, and encouragement throughout this challenging journey.

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Section 1: Nature of the Project

Work stress is a key issue that nurses have to manage in their work environment. There is a need for education and prevention of work stress in the psychiatric nurse population based on personal experience, observation of staff in the practice setting, and review of current literature. Psychiatric nurses are at risk of developing high levels of stress that affect their interpersonal relationships, job satisfaction, and quality of patient care (Bang & Park, 2016). The purpose of the project was to design, implement, and evaluate a stress management educational program focusing on work stress among practicing psychiatric nurses to assist them in decreasing stress and absenteeism. The goal of this project was to encourage a culture of awareness and mindfulness about work stress in order to promote health/well-being and decrease absenteeism, which have a significant effect on productivity and the quality of patient care (Bang & Park, 2016; Tabaj, Pastirk, Bitenc, & Masten, 2015). The potential positive social change implications were to strengthen the psychiatric nursing workforce at the local institution. Social change benefits may also include creating more effective health care policies that will help nurses to be more mindful/self-aware, increase their ability to avoid work stress, and improve the overall quality of care provided by psychiatric nurses. Section 1 presents the problem statement, purpose, nature of the doctoral study, significance of the project, and summary.

Problem Statement

The local nursing practice problem that was the focus of this doctoral project involved psychiatric nurses creating nonspecific unsuccessful coping strategies to

manage their stress in the absence of a stress management program. Factors that contribute to stress at the project site include high workload, staff shortages, poor working environment, lack of support and motivation from supervisors and managers, conflicts among treatment team members, aggressive and violent patients, and shortened or lack of lunch breaks. Nurses at the project site are frequently absent from work due to stress related to work, which negatively impacts patient care. When nurses are exposed to a high level of job stress, it may lead to poor quality of patient care that can result in lower job satisfaction, increased turnover, and reduced quality of care (Bang & Park, 2016). The significance of this project to the field of psychiatric nursing was demonstrated at the project site by providing psychiatric nurses with a stress management education program that was specific to their practice needs.

Local Relevance

Psychiatric nurses at the project site experience increased levels of stress without any resource or system in place to help them manage stress. According to the assistant director of nursing (personal communication, April 4, 2017), the facility does not have an official process to support nurses in managing work stress. The lack of a recognized stress management program had been reported in the Nursing Leadership Council meeting by management staff members (SGHC, 2017). The assistant director of nursing reported that the issue of stress management had been presented at senior management meetings (personal communication, April 4, 2017). In a grand round presentation in February 2017 (SGHC, 2017), the presenter acknowledged the levels of stress experienced by psychiatric nurses and discussed an education plan for the prevention and

management of work stress that could affect the nurses' well-being (personal communication, April 4, 2017). The unit manager explained that the prevention and management of work stress education program has not been implemented at any level in the facility (personal communication, April 4, 2017). The director of learning resources indicated that nurse education is conducted annually, but the emphasis is on training skills and mandatory competencies (personal communication, April 4, 2017).

Psychiatric nurses are frontline care providers, and if they are to do their jobs effectively and efficiently, health organizations must address and support the delivery of quality health care while protecting nurses from the effects of stress (Bang & Park, 2016). The current levels of stress among nurses at the project site may result in reduced quality of patient care services. Some of the potential benefits to the project site include reduced stress levels for psychiatric nurses, increased nurse productivity, decreased rates of absenteeism and turnover, increased workforce retention, and greater job satisfaction. Enhanced role satisfaction may lead to the promotion of nurses' behaviors that decrease their levels of stress. Implementing evidence-based interventions to decrease work stress through the development of an in-service educational program may affect positive social change. Leadership may encourage the nurses to participate in the planned program to decrease their stress in the work environment. Staff nurses and managers should be encouraged to participate in such programs that may assist in building a stress-free work environment in which nurses can perform their duties while providing high-quality care to their patient population.

Significance to Nursing Practice

Developing a stress management program for addressing work stress holds significance for the field of nursing practice because the quality and performance of a health care system are dependent on its workforce. Improving the working conditions for psychiatric nurses may make the work more satisfying and increase the number of nurses interested in psychiatric nursing. Through this project, nurses may be able to identify coping strategies while working in inpatient psychiatric units. These strategies may include social, emotional, and relaxation therapies that may help reduce tension from the body and clear the mind, thereby improving the physical and mental health of the nurse (Bowen, Edwards, Lingard, & Cattell, 2014).

In addition, nurses may learn how to manage conflicts with peers and other health care professionals by using problem-solving strategies. Supervisors, on the other hand, may learn how to use managerial strategies to improve work environments that may increase job satisfaction and decrease absenteeism/turnover. Similarly, knowledge of stress management can help nurse administrators create work environments that may provide staff with access to opportunity, information, resources, and empowerment (Bhui, Dinos, Galant-Miecznikowska, & de Jongh, 2016).

Purpose

Most research on work stress has focused on general nursing, but limited attention has been paid to psychiatric nurses who are the largest professional group providing care to patients in the field of mental health services (Mathew, Ram, Bhattacharjee, Bhattacharjee, & Sharma, 2013). This current evidence-based project was designed to

build on studies that address work stress among health care professionals (see McTiernan & McDonald, 2015; Pereira et al., 2014; Tabaj et al., 2015; Wu et al., 2014). The goal of this project was to decrease work stress and absenteeism among practicing psychiatric nurses working in an inpatient mental health hospital and to develop an educational program that would decrease stress and absenteeism. The purpose of the project was to design, implement, and evaluate an educational program focusing on work stress among psychiatric nurses. The implications for positive social change include minimizing stress and improving stress management practices as well as promoting effective working conditions that may prevent stress, enhance well-being, and decrease absenteeism. Addressing employee stress and well-being may increase the overall health of the work environment. In addition, positive psychological skills for work stress may have positive spillover effects into the home, which may lead to increases in employees' participation in civic duties to improve social conditions.

Gap in Practice

The gap in practice was the lack of an educational program at the site or resources to provide psychiatric nurses with stress management interventions to decrease stress. These resources include person-focused interventions, organization-focused interventions, and integrated stress-prevention initiatives such as mindfulness training, meditation sessions, and peer support groups (Allen et al., 2015; Roberts, Grubb, & Grosch, 2012). Information obtained from discussions with the admission unit managers, long-term care units, research unit, adolescent unit, and geriatric unit at the project site suggested that current methods for managing stress consist of nurses calling in sick and

staying home for a number of days (Department of Nursing callout log, February, 2018). Psychiatric patients require specialized nursing care, and nurses are expected to provide continuous monitoring and support to these patients (Hasan, 2017). Psychiatric nurses become tired and fatigued as they work in poor environments with increased workloads and lack of motivation (Filgueira Martins Rodriguez, Pereira Santos, & Sousa, 2017; Tabaj et al., 2015). Work stress is a major problem in today's organization.

The literature showed that health care providers who deliver care to their customers use multiple coping interventions when confronted with stressors in their workplace. Research with health care providers such as nurses suggested stress management interventions that target individuals and organizations (Bhui, Dinos, Stansfeld, & White, 2012). These interventions can be categorized as preventive interventions at primary, secondary, or tertiary levels (Bhui et al., 2012). Primary interventions are used to prevent stress, secondary interventions are used to reduce the severity of symptoms, and tertiary interventions are used to provide treatment and maximize functioning among those with chronic health conditions (Bhui et al., 2012). Individual interventions may include stress awareness training and cognitive behavioral therapy for psychological and emotional stress. Some interventions aim at both the individual and the organization, for example policies to secure an improved work–life balance and peer support groups.

Practice-Focused Question

In this project, I developed, implemented, and evaluated an educational program that would provide strategies to decrease stress among practicing psychiatric nurses. The

practice-focused question guiding this project was the following: Can an evidence-based stress management education program decrease stress and absenteeism among practicing psychiatric nurses at the project site? To determine whether the intervention was successful, I used the Perceived Stress Scale (PSS) as a pre- and posttest, and retrospective and prospective data were collected on absenteeism.

Addressing the Practice Gap

When staff work an excessive amount of overtime, low feelings of satisfaction and a lack of staff stress management resources can directly affect patient care, safety, outcomes, and satisfaction (Hasan, 2017; Mazurenko, Gupte, & Shan, 2015; Sarafis et al., 2016). The current practice of frequent absenteeism at the project site has been discussed by senior leadership. Nurses are trained to care for other people with less emphasis on their own health and well-being. Because nurses are an integral part of the health team, care should be taken to ensure their well-being, including the identification of stress and the promotion of healthy coping strategies. The evidence-based project may address the gap in practice by synthesizing, developing, and formalizing the implementation of an educational program that may help practicing psychiatric nurses reduce their stress. The outcome of this DNP project may fill a gap in practice by providing an educational program that can inform psychiatric nurses about work stress and decreasing absenteeism. By learning interventions to decrease work-related stress, psychiatric nurses may decrease their stress levels and improve the quality of care they provide to patients and their families. Leadership at the facility may use the evidence and recommendations

to develop nursing and health care policies to improve the psychiatric nurses' abilities to manage workplace stressors.

Nature of the Doctoral Project

The sources of evidence that were used to support and address the purpose of this doctoral project were obtained by synthesizing nursing literature from the Cochrane Library, National Guideline Clearinghouse, and the Joanna Briggs Institute EBP Database for EBP Research. The Cochrane database can be used to identify and retrieve systematic reviews and meta-analyses. Informative resources were also accessed from the Walden University Center for Research Quality website, nursing white papers, and textbooks that contain current evidence-based information on work stress. In addition, Walden University databases such as the Cumulative Index of Nursing and Allied Health (CINAHL) and EBSCOhost were used to obtain primary evidence from peer-reviewed journals, and Google Scholar was used to gather evidence-based best practices. Searches in these databases were conducted using Boolean search strings such as *work stress* OR *occupational stress* OR *job stress* AND *psychiatric nurses* AND *health*; *stress management* OR *intervention* OR *rehabilitation* OR *prevention*. I synthesized the evidence from the literature published between 2011 and 2019.

The doctoral project was conducted with the aim of reviewing the impact of work stress among practicing psychiatric nurses, implementing an educational program on work stress, and identifying strategies and interventions that would decrease the incidence of work stress. The purpose of the project was to design, implement, and evaluate a stress management educational program focusing on work stress among

practicing psychiatric nurses to assist them in decreasing stress and absenteeism before and after the educational program. The PSS, an instrument that measures psychosocial stress, its stressors, and its impact at the individual, organizational, and societal levels, was used to measure work stress. The PSS includes questions about the respondent's feelings and thoughts during the last month, and questions about current levels of experienced stress. The questionnaire is designed to reveal the level of stress of an individual by addressing perceived psychological symptoms of stress. I used the PSS to measure the nurses' stress level before and after the implementation of the stress management program.

Use of PSS to Measure Baseline

All psychiatric nurses working at the project site were asked to complete the self-reported questionnaires to assess the stressors that nurses face on the job. The questionnaires included questions on gender, age, educational level, and position. The questionnaires were distributed and collected in sealed envelopes by the unit managers, and the collected questionnaires were submitted to me for analysis using descriptive statistics. The data collected from the completed questionnaires were then uploaded into my computer at my home office, which was password protected, and the paper questionnaires were stored in a locked cabinet to be destroyed or shredded after five years.

Stress Management Program

Stress management interventions refer to a class of activities that are used by organizations to improve employee well-being and reduce stress by addressing the causes

of stress or by reducing the impact of stress on an individual (Czabała, Charzyńska, & Mroziak, 2011). Information about work-related stressors and coping skills were distributed through the hospital's computer network. The information included details on the identification of stressors, goal setting for stress management, cognitive behavioral therapy, anger management training, abdominal breathing techniques, and muscle relaxation techniques.

The approach used to decrease work stress among psychiatric nurses at the project site was the implementation of a comprehensive stress management program. To manage work-related stress, effective interventions applicable to the workplace are required. Research has shown that work stress management has been focused on interventions corresponding to secondary and tertiary prevention (Czabała et al., 2011). Secondary interventions are intended to modify an individual's response to stressors. Secondary interventions are also intended to target the nurse with the underlying assumption that focusing on individuals' responses to stressors should be done in addition to eliminating or decreasing stressors. Tertiary interventions are intended to minimize the effects of stress-related problems once they have occurred, through treatment or management of symptoms or disease. Tertiary interventions include efforts to help nurses cope with reactions to stressful conditions, counseling, and return-to-work and other rehabilitation programs.

The secondary and tertiary interventions focus on the individual and the organizational levels. At the organizational level, facilitator workshops, such as group discussions, are encouraged. The facilitators participate in a team discussion and

encourage nurses to make an active commitment. Facilitator workshops are followed by team-based participatory workshops. Organizational stress management strategies such as ensuring that workloads are in line with workers' capabilities and resources, creating a collaborative work environment, and providing opportunities for social interaction are encouraged. In addition, at the organizational level, job adjustment and workplace communication activation are applied to improve the occupational context.

In the current project, data collection started with the individual baseline results of the PSS, which helped nurses to identify their work-related stressors and strengthen their coping skills. Individual stress management strategies included providing educational tip sheets and flyers about stress, its causes, and reduction strategies; providing encouragement, time, and space for yoga or other stress management activities; and providing mindfulness training. Furthermore, at the individual level, relaxation and cognitive behavioral techniques were applied to improve the individual's psychological resources and responses. Different approaches, such as encouraging nurses to exercise at work and off the job and setting up a support group, were offered. Stress reduction strategies were instituted, such as giving nurses flex time, arranging regular meetings to share information, promoting job sharing, adjusting work hours considering individual circumstances such as part-time schedules and voluntary reduced work time, extending lunch hours, and implementing a return-to-work program. The workplace stress management program was conducted within an 8-week period. Evaluation of the stress management program began by examining data relating to absenteeism, presenteeism, turnover, and nurses' use of sick leave.

Use of PSS to Measure Stress Post Intervention

One month after the implementation of the organizational and individual level interventions, improved activity checks, such as adjusting work hours, considering individual circumstances, and arranging regular meetings to share information, were conducted by the stress management team. All of the psychiatric nurses working at the project site were asked to complete the PSS questionnaires after the implementation of the stress management program to assess the stressors that nurses face on the job. The questionnaires included questions on gender, age, educational level, and position. Identifiable personal information such as name, department, or address was not collected, and participants were informed that their responses would be kept confidential. The questionnaires were collected in sealed envelopes by the unit managers who forwarded them to me. The data collected from the completed questionnaires were uploaded into my computer at my home office, which was password protected and the paper questionnaires were then stored in a locked cabinet to be destroyed after five years. I analyzed the data from the questionnaires using descriptive statistics. The survey was done to assess whether there was a reduction in the respondents' level of work stress over a 30-day period after exposure to the educational interventions.

A comparison of PSS scores was obtained through pre- and post-stress surveys and was used for evaluating the intervention effect. At the organization level, active participation of nurses in the workshops by promoting good communication techniques and alleviating the problems caused by work-related stressors, such as interpersonal conflicts, adverse effects to the organizational system, and deterioration of the

organizational climate, was an indication that the interventions had decreased the stress incidence. At the individual level, a reduction in psychological symptoms, such as anxiety, depression, aggressiveness, sleeping problems and cognitive problems among psychiatric nurses as measured by the PSS, was an indication that the interventions had decreased the stress incidence.

Purpose Statement Connecting the Gap in Practice

The purpose of the DNP project was to address a gap that had been identified in practice, which was no stress management program for practicing psychiatric nurses at the project site. Addressing the gap was achieved by developing an evidence-based educational program that addressed a reduction in work stress. A review of the literature and synthesis of studies showed that work stress may lead to job dissatisfaction, increased staff turnover, and lower quality of patient care (Bang & Park, 2016; Filgueira Martins Rodriguez et al., 2017; Sharma, Davey Shukla, Shrivastava, & Bansal, 2014; Tabaj et al., 2015). Primary findings indicated that nurses who care for psychiatric patients are exposed to increased levels of stress and have a poorer health status (Adriaenssens, De Gucht, & Maes, 2015). Secondary findings revealed that stress, when not properly managed, can negatively impact patient care (Filgueira Martins Rodriguez et al., 2017). Evidence-based literature also indicated that work stress can be avoided using strategies for stress management (American Nurses Association [ANA], 2014). The DNP project was conducted to provide psychiatric nurses with an evidence-based education program to decrease work stress and absenteeism.

Significance of the Project

The issue of work stress is important in the general workforce, but is especially important in the field of nursing. Work stress and health problems constitute societal and economic problems (Nayak et al., 2016). Stress has an impact on individuals' health, well-being, and job satisfaction. Stress also has a negative impact on the degree of absenteeism and turnover that nurses and other health care professionals exhibit (Hausser, Mojzisch, Niesel, & Schulz-Hardt, 2010). The growing increase of stress among nurses will eventually affect the quality of services and care of patients (Sharma et al., 2014). Regardless of the cause, nurse work stress has extensive consequences. Evidence from the American Nurses Association (ANA) position statement addressing nurse fatigue to promote safety and health suggested that stress from long hours at work, rotating shifts, and infrequent breaks slows down reaction times, reduces motivation, and increases errors, all of which can affect patient care outcomes and patient satisfaction levels (ANA, 2014; Trossman, 2015). Patient safety is a key constituent of the quality of health services. Nurses are the largest group of professionals who care for patients, and observing safety in nursing care should reduce injuries, disability, morbidity, and mortality D'Souza, Umarani, & Shetty Asha, 2015). High stress can lead to a decline in the quality of nursing care (Farzianpour et al., 2016). Safe practices are at the core of nursing care to maintain and improve patient safety; unsafe practices can lead to legal consequences and irreparable harm to patients (Bianchi, 2016). They may also have negative consequences including long-term accommodation, patients suffering, additional

costs, dissatisfaction with the hospitals, and dissatisfaction with the health system (Kurnat-Thoma, El-Banna, Oakcrum, & Tyroler, 2017).

Stakeholders

Reduction of work stress at the project site involves the combined efforts of all stakeholders. Stakeholders consist of nurse supervisors/managers, staff nurses, and patients. The DNP project has the potential to impact the stakeholders in a variety of ways. The project may assist nurse managers and staff nurses in raising their awareness regarding the benefits of good working practices and may encourage the implementation of strategies that focus on maintaining a healthy working environment to minimize levels of stress. Nurse managers/supervisors may experience a positive change congruent with their level of communication with staff nurses. These managers may also benefit from improved coping abilities through a deeper understanding of the issues, implications, and strategies that address work-related stress.

Staff nurses may benefit from recognizing the signs of stress in their daily work life and developing a better understanding of how to approach it. Nurses may also benefit from having managers who are better able to provide support and unit guidance, real-time mentoring, and modeling of preferred behaviors for staff, as opposed to managers who are negatively affected by stress (see Moss, Good, Gozal, Kleinpell, & Sessler, 2016). An additional benefit for staff nurses may be increased job satisfaction and an improved ability to focus on daily responsibilities as a result of better stress management (see McVicar, 2015).

Patients may benefit the most as staff nurses become more inclined to follow directions from their supervisors/managers who design the care behaviors. According to Loveridge (2017), managers with poor stress coping management skills are not effective leaders. Therefore, improving supervisors/managers' abilities to pay attention to work-related stress and burnout may promote better patient engagement and overall patient experience (Byron et al., 2014). In addressing these issues, the project site may benefit by having more staff at work during any given shift as well as reducing absenteeism and its associated costs. Addressing a local problem may improve the work environment, thereby contributing to a healthier society.

Contributions to Practice

The goal of nursing service is to provide the patient with quality care, thereby improving patient care outcomes. Nurses are the most important resources in every health care institution; therefore, maintaining and supporting their health ensures their ability to work, maintain standards, and provide quality patient care (Salilih & Abajobir, 2014). Although work stress is a part of life, excessive stress may have an adverse impact that decreases work output, increases absenteeism, and decreases work productivity (Bang & Park, 2016). The current project contributed to practice through seeking to guide health care leadership in better understanding the importance of how caring management can promote high-quality patient care and reduce work stress, burnout, and staff nurse turnover while improving the nurses' overall well-being (see Vassey, 2014).

Positive coping strategies for the management of stress are of critical importance for health care providers (McVicar, 2015). Nurse leaders can encourage a positive work

environment through incorporating positive attitudes, demonstrating practical coping behaviors by engaging in the support of nurses, and openly receiving and listening to feedback from staff nurses on ways to improve the work environment. Staff nurses, on the other hand, may benefit from nurse leaders who provide stronger support and encouragement, coach/mentor them, and serve as role models for desired behaviors. The educational project has the potential to contribute to nursing practice by promoting a better life balance among practicing psychiatric nurses, thereby enhancing staff retention, well-being, and quality of patient care.

Potential Transferability

Managing work stress and burnout is a global concern that is getting the attention of researchers investigating best practices. The development of an evidence-based educational program to reduce work stress levels among practicing psychiatric nurses may provide an understanding of how work-related stress can be prevented and managed in public health settings and businesses aiming to decrease absenteeism and increase productivity. The comprehensive stress management program may provide the framework to instigate similar programs at other units at the practice site. Novice psychiatric nurses may benefit from receiving training or information on stress management before practicing on the units. Potential transferability of this project may also exist in organizations and professions that are trying to reduce work-related stress. There is potential transferability for this DNP project in similar practice facilities seeking to implement evidence-based stress management, including acute and chronic care settings.

Implications for Positive Social Change

The evidence-based educational project has implications for positive social change within the selected practice environments because of the high levels of stress currently experienced by staff nurses and nurse managers. According to Bolima (2015), there is a significant relationship between caring supervision and increased job satisfaction among staff nurses. Psychiatric nurses' practice will benefit from increased job satisfaction that translates into more focused attention and enhanced delivery of patient care (McVicar, 2015; Moss et al., 2016). Reducing the harmful effects of stress may also influence nursing practice through a creative ability to provide staff with mentorship/coaching and the coordination of care delivery (Moss et al., 2016). Further implications include continued professional growth, enhanced work-life balance, and decreased turnover among nursing staff. Knowledge and use of effective stress management practices may translate into more positive nursing experiences for nurses and patients. The social effects of the project include nurses, patients, and families benefitting from an increased understanding of the strategies that support stress reduction as they interact with each other in more positive and productive ways.

The project may support the Walden University mission to promote positive social change through a better understanding of psychiatric hospitals and how they can reduce the effects of stress on the nursing staffs' well-being and productivity. With reduced levels of stress, nurses may be better able to provide consistent quality care while experiencing increased job satisfaction. A direct result of this social change is that hospital organizations may experience lower staff turnover, higher staff retention, and

higher levels of job satisfaction among their psychiatric nursing staff, which may result in enhanced patient care (see Filgueira Martins Rodriguez et al., 2017; Koy, Yunibhand, Angsuroch, & Fisher, 2015).

Summary

Nursing has been identified as an occupation that has high levels of stress. Work stress among psychiatric nurses has become a critical issue in the nursing profession. Work stress causes hazardous impacts not only on nurses' health, but also their abilities to cope with work demands. Work stress affects employees and organizations and can lead to illness, staff turnover, and absenteeism. Work stress costs organizations all over the world millions of dollars, and on an individual level it affects the physical and psychological well-being of nurses, which may have harmful effects on patient care. Work stress results in an increased risk of absence from work, decreased work satisfaction, and increased intention to leave the profession (Kurnat-Thoma, El-Banna, Oakcrum, & Tyroler, 2017). Psychiatric nurses must have access to support systems to help them manage their stress. Stress management education programs are absent at the practice site, representing a gap in practice. An evidence-based stress management program has the potential for counterbalancing work stress among practicing psychiatric nurses. Aspects of this project may be transferable to other areas of nursing practice because the principles guiding stress management may be beneficial to all health care organizations and nursing administration. The DNP project included formalized education on the techniques used to reduce psychiatric nurse work stress, which may result in positive social change. Section 2 of this project study addresses the evidence-

based concepts, models, and theories that were applied to the education program, and includes relevance to nursing practice, local background and context, and my role in the project.

Section 2: Background and Context

Work stress is psychologically and physically challenging and may lead to high rates of absenteeism and turnover. The nursing profession is perceived as stressful and demanding. Psychiatric nurses promote health and wellness as they serve in indirect and direct care roles. However, their work exposes them to a lot of stress as a result of the physical labor, exposure to violent patients, long work hours, poor staffing, challenging workspaces, increased paperwork, and interpersonal relationships (Hamaideh, 2011). Stress can affect a person physically, emotionally, and behaviorally (Sugawara et al., 2017). Psychiatric nurses adopting unhealthy lifestyle behaviors are at significantly higher risk for developing chronic diseases and are at increased risk of experiencing exhaustion, job dissatisfaction, and turnover (Kurnat-Thoma, El-Banna, Oakcrum, & Tyroler, 2017). Research on work stress indicated that stress is a challenging problem for psychiatric nurses (Sugawara et al., 2017), and exploring this issue is essential for improving efficiency within the current U.S. health care system.

At the project site, staff nurses develop nonspecific coping mechanisms to manage their stress because there are no resources available for staff to help manage their stress (CHARGE NURSES, personal communication, April 4, 2017). These nurses reported having low energy, feeling tired, and being easily fatigued. They also noted that they are easily irritated, not motivated, and call in sick on a regular basis for several days. These nurses feel drained without any source of replenishment. Providing psychiatric nurses with an evidence-based comprehensive stress management education program that addresses decreasing work stress may positively impact their work. The practice-focused

question for the project was the following: Can an evidence-based stress management education program empower psychiatric nurses to manage work-related stressors and decrease stress? Strengthening psychiatric nurses' abilities to practice healthy lifestyle behaviors may serve as a helpful tool in preventing negative workplace stress, promote personal well-being, and retaining qualified health care providers. The purpose of this DNP project was to develop an evidence-based education program to help psychiatric nurses manage their stress. This program focused on stress management that supports nurses in experiencing more job satisfaction and decreased stress. Section 2 addresses the concepts, models, and theories that informed this project, the relevance of the project to nursing practice, background information and context, and the role of the project leader.

Concepts, Models, and Theories

Stress is a condition that occurs when a person recognizes that the circumstances or strains facing them may be more than they can endure. Work stress can be defined as the physical and emotional responses that occur when the demands of the job do not match the capabilities, resources, or needs of the individual to meet those demands and which, over a period of time, lead to ill health (Okita et al., 2017). Stress is a result of a mismatch between the demands and pressures on the person and their knowledge and abilities, which challenges their ability to cope with work (C. Wang, Yen, & Liu, 2015). According to Milutinović, Golubović, Brkić, and Prokeš (2012), stress is a reaction to numerous unfavorable conditions related to work content, work organization, and working environment.

Work stress has received a considerable amount of attention from professionals and researchers. Many occupational health scholars have developed or contributed to models detailing theoretical approaches to a person's experience of stress. A single theoretical framework was insufficient to guide this project. Theoretical models of stress consider it to be either related to adverse life events and stressful environments or the individual's physiological and psychological responses to stressors, or a transactional interaction between the individual and environment. Different theoretical models conceptualize stress as a result of an imbalance between perceptions of external demands and internal resources. The conceptualization of work stress is vital when developing interventions for the workplace. However, different models of stress reveal that psychologically significant events can translate into physiological changes that may result in serious health problems (Seyle, 1983). Four prominent transactional theories (person-environment fit theory [P-E fit theory], job demand-control [Support] theory, the job demands-resources [JD-R] model, and the effort-reward imbalance [ERI] model) were used to inform the definition of work-related stress and were used to clarify the causes and mechanisms that underpin work stress. The key principle across these theories is an imbalance, which is defined as a lack of balance between demands and coping resources or between efforts and rewards (Siegrist & Li, 2016).

Transactional Model

The most commonly used model is the transactional theory of stress and coping, which suggests that stress, is the direct product of a transaction between a person and their environment that may strain their resources and threaten their well-being (Lazarus &

Folkman, 1984). The model recognizes that stress can manifest physiologically, psychologically, behaviorally, and socially with harmful consequences to both the employee and the organization (Lazarus & Folkman, 1984). The model also suggests that stress is the result of a dynamic interaction between the individual and the environment (Cox, 1993) because stress results when the perceived demands outweigh the perceived capability of the workers. Stressful experiences are construed as person-environment transactions.

The transactional model suggests three types of cognitive appraisal: primary appraisal, secondary appraisal, and reappraisal (Lazarus & Folkman, 1984). Primary appraisal is the person's decision about the magnitude of an event as stressful, encouraging, convenient, difficult, or inappropriate. The second appraisal follows when the person faces a stressor. Secondary appraisals address a person's reaction to the situation. Tertiary appraisal or reappraisal refers to a changed appraisal. The model emphasizes that reciprocal processes between an individual and the environment can be mediated by cognitive reappraisal (Lazarus & Folkman, 1984).

The assumptions of the transactional theory of stress and coping supported this project. The theory of stress has drawn attention to nursing job characteristics and nurses' perceptions of stressors. The transactional model illustrates how people assess, manage, and experience occupational stress. According to the model, the experience of stress, coping, and the development of negative outcomes can occur at different points in the process of work stress and coping, and can be stimulated by both psychological and behavioral coping factors (Lazarus & Folkman, 1984). The transactional theory

highlights individual differences in ways of coping and examining problems, previous experiences, and personality type, which inform and affect nurses' workplace and their individual stress management. Stress occurs when a person encounters an environmental demand; the stress response depends on their cognitive appraisal, which refers to an interpretation of the stressor based on their ability to cope with it.

Nurses appraise environmental stressors, including their level of possible threats and expenses. Stressors assert their effects based on how a person perceives and evaluates them (Ganster & Rosen, 2013). These experiences are mediated by the person's appraisal of the stressor and the social and cultural resources at their disposal. When faced with a stressor, the nurse evaluates the possible threat (primary appraisal), which is an assessment of the nurse's coping resources and options. According to Folkman and Lazarus (1984), coping has been described as any cognitive or behavioral efforts to manage, minimize, or tolerate events that people perceive as threatening to their well-being. When a nurse interprets the workload of the job as exceed their ability to complete the job, they will experience a stress response. The appraisal process is subjective and personal and depends on a nurse's evaluation of their ability to cope with the stressor.

Nurses make potential plans to deal with stressors using known coping methods and past experience (secondary appraisal), and then initiate coping. Reappraisal can occur when there is new information from the environment, because of the individual's own reactions to the environment, and/or a result of cognitive coping efforts (Lazarus & Folkman, 1984). Actual coping efforts aimed at regulation of the problem give rise to outcomes of the coping process. The way nurses perceive a specific stressor as a threat or

challenge can influence their coping patterns which, in turn, may impact their health outcomes. Hence, the best management and coping strategies for nurses involves a combination of personal coping skills, effective organizational plans and social support. Therefore, according to the transactional model, the experienced workplace stress is associated with exposure to particular workplace scenarios and a person's evaluation of their own coping difficulties.

Person-Environment Fit Theory

The Person-Environment Fit theory (P-E Fit theory) is an interactional theory of work-related psychological distress, which signifies that work-related stress comes about as a result of a lack of fit between the person's skills, resources, and abilities on one hand and the demands of the work environment on the other hand (French, Caplan, & Van Harrison, 1982). The P-E Fit model emphasizes that interaction between the environmental stimulus and the associated individual's responses forms the foundation of stress (French, Caplan, & Van Harrison, 1982). The P-E Fit theory explains the interaction between the individual and the environment in shaping their response to work situations and events, but also highlights the importance of the individual's perception of the environment and the interaction between them (French, Caplan, & Van Harrison, 1982). The core premise of the P-E fit theory is that stress arises not from the person or environment separately, but rather by their fit or congruence with one another. The P-E fit approach focuses on the correspondence between environmental demands and personal skills and abilities. The lack of correspondence generates harmful psychological, physiological, and behavioral outcomes, which ultimately result in increased morbidity

and mortality. A lack of fit can occur when the demands of the work environment exceed the employee's ability. In addition, a lack of fit can occur when the employee's needs consistently fail to be met by the work environment. Furthermore, a combination of the previous two in which an employee's needs are not being met while at the same time their abilities are over-stretched can also create a lack of fit (French, Caplan, & Van Harrison, 1982). According to the P-E fit theory, when a person is unable to adjust in the prevailing environment, the environment becomes a stressor and the individual becomes stressed.

The assumptions of the P-E Fit theory support this project. The theory offers a framework for assessing and predicting how characteristics of the nurse and the work environment jointly determine nurses' well-being, and in the light of this knowledge, how a model for identifying points of preventive intervention may be elaborated. The P-E fit theory focuses on the interaction between characteristics of the nurse and the work environment, whereby the nurse not only influences his or her work environment, but the work environment also affects the nurse. The P-E theory involves the fit between the demands of the environment and the nurses' abilities. Demands may include both quantitative and qualitative job requirements, role expectations, and organizational norms; whereas abilities may consist of aptitudes, skills, training, time, and energy the nurse may gather to meet the demands. French, Caplan, & Van Harrison (1982) explained that, when stressors are potentially overwhelming, some disconnection from the situation or self may occur, which may cause some anxiety and facilitate maladaptation. The capability of the fit between a nurse and the environment can affect the person's

motivation. It can also affect the person's behavior, and overall mental and physical health. For example, if the fit is most favorable, the nurse's performance may be facilitated; if it is incongruous, the nurse may experience maladaptation. The theory also entails the match between the needs of the nurse and the supplies in the environment that relate to the nurse's needs. Supplies refer to unimportant and fundamental resources and rewards that may fulfill the nurse's needs, such as food, shelter, and social involvement, (French, Caplan, & Van Harrison, 1982).

Job Demand-Control (Support) Theory

The Job Demand-Control (JDC) model (Karasek, 1979) and the Job Demand-Control-Support (JDCS) model (Johnson & Hall, 1988) focus on psychological well-being that accounts for the connection between job demands, job control, negative health, and psychological outcomes. The JDCS model assumes that low levels of social support from supervisors and peers can also contribute to job strain. The JDC theory stipulates that work-related stress can result from the interaction between several psychological job demands relating to workload and skill judgment (Karasek, 1979). The main assumption of the JDCS model proposes that the highest job strain is experienced in environments characterized by high job demands and low job control. The JDC theory suggests that people experiencing high demands matched with low control are more likely to experience psychological strain, work-related stress, and in the long term, poor physical and mental health (Crescenzo, 2016). The demands component of the model is conceptualized as time pressure due to a heavy workload (Aida, Ibrahim, & Ohtsuka, 2012), but it may be broadened to also include role ambiguity and role conflict. The job

control dimension involves skill discretion and decision authority, and the employees' ability to organize their work, adopt their own initiatives, and exercise the opportunity to make independent decisions to have a voice in what happens in the workplace.

The assumptions of the JDC and JDCS models support this project. The JDC and JDCS models relate the characteristics of a job to health and well-being. In the workplace, employees are the most valuable asset of an organization. Their job dissatisfaction will significantly affect their commitment and dedication to their work and employer.

Stress on the job is generated when expectations are high, and employees do not have full control of the job. Stress may also occur when employees are unable to make informed decisions on how to manage work to achieve optimal results (Crescenzo, 2016). The JCDS theory explains how social support may act as a buffer in high demand situations. Social support such as advice, assistance, and feedback gained from supervisors and senior personnel who are experienced in dealing with work-related issues is helpful. The support provided by co-workers and their supervisor to include emotional support such as providing care, empathy, love, and by listening to others' personal problems is essential to well-being. According to these models, social support can moderate the negative impact of job strain on an employee's physical and mental health (Hausser, Mojzisch, Niesel, & Schulz-Hardt, 2010). The JDC and JDCS models suggest that the most at-risk group for poor physical and mental health are those employees who are exposed to job strain in the form of high demands and low control, coupled with low workplace support (Aida, Ibrahim, & Ohtsuka, 2012). Nurses working in high stess jobs

experience the lowest well-being. However, the control can moderate the negative effects of high demands on well-being.

Effort-Reward Imbalance Model

The ERI model posits that unsuccessful reciprocity between high efforts spent at work and low rewards received are associated with strong negative emotions and stress reactions with unfavorable long□term effects on health. The ERI model assumes that effort at work is spent as part of a psychological contract, based on the norm of social reciprocity where effort spent at work is matched with rewards provided in terms of money, esteem, and career opportunities (Siegrist & Li, 2016). In this model, effort can be defined as the demands and obligations the nurse is faced with, and reward can be explained as the money, respect/value, and career opportunities or job security, the nurse expects in return, either from the employer or from society at large (Siegrist, 2001). Work-related stress in the ERI model is perceived as lack of justice in the reciprocity of efforts spent and rewards received at work (Siegrist, 2005). According to the model, reward reflects distributive justice (Siegrist, 2005), which refers to how the employee understands the fairness of the outcomes in relation to the job involvement.

The assumptions of the ERI model also support this project because the model offers accepted explanations of the relationship between stressful working conditions, job strain, psychological, and physical ill health. Siegrist and Li (2016) proposed that stress related to the imbalance between effort and reward can arise when a nurse has a poorly defined work contract or where the nurse has little choice concerning alternative employment opportunities. According to the ERI model, job dissatisfaction is imminent

when there is an imbalance between work effort and reward, such that the effort is greater than the reward, which may lead to a range of adverse health out-comes (Siegrist & Li, 2016). An unequal relationship between the effort spent and rewards received can result in the emotional distress associated with stress response and an increased risk of poor health (Eddy, Heckenberg, Wertheim, Kent, & Wright, 2016; Rugulies, Aust, & Madsen, 2017). The knowledge of a lack of reciprocity can create negative feelings in a nurse. The negative feeling can eventually increase the susceptibility of illness due to continued strain reactions in the autonomic nervous system (see Filgueira Martins Rodriguez et al., 2017). When a nurse is not sufficiently rewarded with respect to their efforts, such behavior may also signal to colleagues and superiors that the nurse has a low social standing and little support from management. In such a scenario, nurses may accept the imbalance for reasons such as the prospect of improved working conditions and cope with the demands at work through an over-commitment (Kinman, 2016; Siegrist & Wahrendorf, 2016).

These four transactional theories of work-related stress are well suited and appropriate for the DNP project because they can be used to develop programs that seek to improve employees' health and well-being. The various stress models are very similar but not interchangeable; instead they complement each other and reflect to some extent different aspects of the psychosocial work environment (Siegrist, 2001). For example, the Job Demand-Control model highlights task-level control, and the ERI model puts the spotlight on the reward the employee receives (Siegrist, 2001). Both theories have helped to clarify the causes and mechanisms that underpin work-related stress. The transactional

theories explicitly and implicitly recognize the central role of psychological processes such as, perception, cognition, and emotion; in understanding how the individual recognizes, experiences, and responds to stressful situations; how they attempt to cope with that experience; and how it might affect their physical, psychological, and social health. These models have attained prominence in occupational stress among researchers, gaining recognition as the leading job stress models (Schaufeli & Taris, 2013).

Job Demands-Resources Model

The JD-R model incorporates all job demands and resources. The model explains how job demands and resources have unique and multiplicative effects on job stress and motivation. The model was developed based on the assumption that every occupation has its own specific risk factors associated with job-related stress. The main assumption of the JD-R model is that the balance between positive and negative job characteristics influences employees' health and well-being with positive job characteristics representing resources and negative characteristics representing demands. In the JD-R model job demands refer to those physical, social, and organizational aspects of the job that require continuous physical or mental effort, and are therefore associated with physiological and psychological cost (Demerouti & Bakker, 2016). Examples of job demands include high work pressure, poor physical environment, longer working hours, or emotionally demanding interactions with clients; while job resources are physical, psychological, social, or organizational aspects of the job that may be useful in accomplishing work goals, decrease job demands at the associated physiological and psychological costs, encourage personal growth and development (Bakker & Demerouti,

2014). According to Bakker (2017), the JD-R theory postulates that job demands lead to stress in the absence of certain resources. The model proposes that increased job demands lead to strain and health problems and high resources lead to increased motivation and higher productivity. The model also proposes that job resources influence motivation or work engagement when job demands are high (Bakker & Demerouti, 2014).

The assumptions of the ERI model also support this project because the model is useful for understanding occupational stress and it emphasizes the motivational qualities of job resources in enhancing employees' well-being (Bakker & Demerouti, 2014). The model is a framework that can be used for organizations to improve employee health and motivation, and at the same time improve various organizational outcomes. The model incorporates many possible working conditions and focuses on both negative and positive indicators of employee well-being. It suggests that employees are more likely to draw on their resources under stressful conditions, including those induced by high demands (Bakker & Demerouti, 2014). According to the JD-R model, nurses are more likely to utilize their resources when faced with more stressful circumstances. Job resources are the social, psychological, physical and organizational dimension of work which reduces the negative effects of job demands, enhances the accomplishment of work goals, and promotes personal growth and development (Bakker & Demerouti, 2014). Lack of resources prevents the employee from meeting the job demands, which further leads to withdrawal behavior. The end result of this withdrawal behavior is disengagement from work (Bakker & Demerouti, 2014). Hence, providing nurses with personal resources helps them to understand, control, and shape those aspects of work environment that

facilitate successful goal accomplishment and raise levels of work engagement (Bakker & Demerouti, 2014).

Evaluation of information at the project site indicates there is a lack of resources to manage stress; hence this educational program will focus on stress reduction. Phases of the nursing process, including the steps of assessment, diagnosis, planning and outcomes, implementation, and evaluation (American Nurses Association, 2016) will be integrated with the JD-R theory. Also, the model provides a broad and flexible framework for assessing job and personal characteristics that affect employees' health and well-being and their associated outcomes, including job performance. The model also provides measures to understand stress and how to use coping strategies to encompass the beneficial effects on health promotion, health education, and disease prevention. The JD-R model is relevant across a wide variety of settings, because it can be tailored to the specific needs of an organization and any given situation. Furthermore, the JD-R model can bridge the gap between occupational health management and human resources management (Corin & Bjork, 2016). Moreover, the JD-R model can be used to fundamentally develop effective strategies and approaches that will improve coping and promote physical, mental, and somatic well-being of the nurses and healthcare providers (Azma, Hosseini, Safarian, & Abedi, 2015; Zandi, Sayari, Ebadi, & Sanainasab, 2011). The JD-R model can help practitioners obtain an understanding of what they may expect in particular situations and what concepts should be targeted to improve employees' health, well-being, and performance. By applying the model's concepts, nurses will be able to determine how job demands and job resources work together and help to predict

critical organizational issues and problems. The JD-R theory can be used to expose both the sources of occupational stress and how the nurses are using coping strategies to process different demands (external or internal) associated with stressors (Bakker & Demerouti, 2017).

Definition of Terms

Stress: Stress has been defined in many ways. Selye (1956) defines stress as a non-specific response of the body to any demand made on it from the external environment. Lazarus and Folkman (1984) define stress as any experience in which environmental demands, internal demands, or both, exceed the individual's adaptive resources. Lazarus and Folkman also describe stress as a relationship between people and the environment that is appraised as demanding or exceeding their resources and as endangering well-being. Stress can be defined as a disturbing situation that occurs in response to unfavorable influences from the internal or external environments (Milutinović et al., 2012). Stress basically involves the relationships between individuals and their environment that are considered as challenging or exceeding their resources and jeopardizing their well-being (Okita et al., 2017). Stress can be viewed as a mismatch between environmental demands and individual capacities or between environmental opportunities and individual needs or goals. It is also seen as an imbalance between perceived demand and individuals' perceptions of their ability to meet that demand (Wang, Yen, & Liu, 2015). With respect to the workplace, stress is seen as a negative characteristic of the work environment that impinges on the individual.

Stress reactions: Stress reactions are responses in the form of physiological response which involves rapid heart rate, increased blood pressure, and increased respiration. The psychological response includes anger, fear, and sleep disruptions that occur when confronted with a stressor (Papathanassiou, Tsaras, Neroliatsiou, & Roupa, 2015).

Stressors: A stressor can be defined as any incident, experience, or environmental stimulus that causes stress in an individual (Rafati, Nouhi, Sabzehvari, & Dehgahan, 2017). These experiences are assumed as pressures or challenges to the individual and can be either physical or psychological. Researchers have found that stressors can make individuals more prone to both physical and psychological problems, including heart disease and anxiety (Kivimäki, Jokela, Nyberg, Singh-Manoux, Fransson, Alfredsson & Clays, 2015; Zandi, Sayari, Ebadi, & Sanainasab, 2011). Stressors can relate to workplace characteristics that present a risk to individuals (Gates, Gillespie, & Succop, 2011). Stressors are substances and actions, which can be experienced from four basic sources—environmental, societal, physiological, and mental. Stressors include poor working conditions, work conflict, physical demands, long working hours, increased workload, lack of resources, and rotating shifts. Stressors also include low wages, inadequate financial rewards, lack of recognition/ appreciation, and violence or lack of cooperation from patients and/or their families (Mehta & Singh, 2015).

Work stress: The National Institute for Occupational Health and Safety (NIOSH) has defined work stress as a harmful physical and emotional response that occurs when job requirements are not consistent with the employees' abilities and needs (NIOSH,

2014). Work stress occurs when a job either poses demands the worker cannot meet or fails to provide sufficient supplies the worker needs. Work stress has physical, mental, and behavioral complications (Tearle, 2013). Physical complications include cardiovascular and musculoskeletal disorders. Behavioral outcomes of work stress include work absenteeism, and sleep disorders (Yaribeygi et al., 2017).

Work environment: The work environment includes an enclosed atmosphere, time, pressures, excessive noise, sudden swings from intense to routine tasks, unpleasant sights and sounds, and long working hours (Tuvesson, 2011; Tuvesson & Eklund, 2014; Tuvesson, Eklund, & Wann□Hansson, 2012). Work environment is one of the most important resources of work stress.

Relevance to Nursing Practice

The concept of stress is highly relevant to the workforce in general and nursing in particular. Work stress in nursing has been the focus of much research over the last 20 years, and psychiatric nursing is regarded as being one of the most stressful occupations in the world (Zaki, 2016). Work stress in the psychiatric nurse population can have a significant effect on nurses' well-being, patient safety, and the health care organization. Stressful work environments can psychologically, mentally, and physically affect staff. Additionally, nurses working with psychiatric patients may be confronted with intense interpersonal interactions with patients and families, dynamic changes in patients' behaviors and emotions, emotional liability, and psychological distress that can be both stressful and challenging (Sailaxmi & Lalitha, 2015). Nurses who are stressed are more likely to be unhealthy, poorly motivated, less productive, and less safe at work (Kelley,

Fenwick, Brekke, & Novaco, 2016). When nurses are in poor physical and mental health the provision of quality patient care, therapeutic practice, absenteeism, and workforce retention are affected (Filgueira Martins Rodriguez et al., 2017). However, studies on stress in mental health nursing have been slower to emerge. There is enough evidence in health-care professions, suggesting that nursing is a stressful job (Mortaghi Ghasemi, Ghahremani, Vahedian azimi, and Ghorbani, 2012; Sailaxmi & Lalitha, 2015; Zaki, 2016 ;). Furthermore, there is a cost for these nurses in terms of health, well-being, self-efficacy, and job dissatisfaction, as well as for the organization in terms of absenteeism and turnover, which in turn may impact the quality of patient care (Gulavani, 2014; Konstantinos & Christina, 2016). Al-Makhaita, Sabra, and Hafez (2014) reported that the prevalence of occupational stress in nurses in Saudi Arabia was 45.5%. In a similar study in Iran, 57.4% of nurses were found to be suffering from average to high occupational stress (Hosseini, Hazavehei, Imanzad, Ghanbarnezhad, & Gharlipour, 2013). Furthermore, Mortaghi Ghasemi et al., (2012) found that 57.4% of the nurses from various job situations in Zanjan were reported to have high degrees of job stress.

According to the US Occupational Safety and Health Institute, the nursing profession is ranked 27th among 130 studied professions regarding work-related mental health problems; more than any other medical profession (Akbarbegloo & Valizadeh, 2011). Work-related stress among psychiatric nurses affects both the nurse and the functioning of the organization including the provision of healthcare. Some of the identified major stressors in hospitals include tension factors such as high work pressure and high demands in the workplace such as longer shifts, threats, workplace violence,

occasional conflicts with doctors, little or no support from managers/supervisors, and the lack of rewards and incentives (Akbarbegloo & Valizadeh, 2011). In a systematic review conducted on the consequences and complications of work-related stress in nursing, it was noted that occupational stress can have a significant negative impact on the individuality of nurses compromising their abilities to accomplish tasks assigned and to remain alert and focused. Occupational stress can also lead to musculoskeletal disorders (Azma, Hosseini, Safarian, & Abedi, 2015; Lee, Lee, Gillen, & Krause, 2014), locomotor diseases (Ghilan, Al-Taiar, Yousfi, Zubaidi, Awadh, & Al-Obeyed, 2013), high rates of anxiety (Zandi, Sayari, Ebadi, & Sanainasab, 2011), and depression (Lin, Lin, Cheng, Wu, & Ou-Yang, 2016; Yoshizawa, Sugawara, Yasui-Furukori, Danjo, Furukori, & Sato, 2016).

Work stress and health problems also constitute both societal and economic concerns as they influence productivity (Ganster & Rosen, 2013). Hospital environments have the potential to increase stress levels, which can negatively affect the health and job satisfaction of nurses as well as the welfare and health of patients, reduce job satisfaction, increase absenteeism, and promote high turnover rates (Mosadeghrad, 2013; Sarafis et al., 2016). The application/incorporation of effective stress management systems and coping strategies are essential steps in supporting productive work while addressing/reducing the level of stress among nurses.

Job-related stress also has the potential to impact employee mental and physical health (Han, Shin, Yoon, Ko, Kim, & Han, 2018). Reducing levels of stress in everyday work life is vital for maintaining the overall health of nurses, as it can improve their

mood, boost immune function, promote longevity, and allow them to be more productive. Employers who institute measures to reduce stress among nurses benefit by having increased staff retention and improved patient outcomes (Pino & Rossini, 2012). Addressing employee stress and well-being raises the overall health of the work environment. The use of an evidence-based project can demonstrate relevance to nursing practice by offering evidence-based solutions to a well-documented challenge facing practicing psychiatric nurses.

History

Since the 1950s our understanding of stress has deepened with Style's (1956) research and the connection made between stress and disease in his model. Selye first introduced the term *stress* to describe physical and psychological responses to harsh conditions or influences. Selye also used the term *stressor* to describe the pressure that when acting on a body, creates stress. Numerous researchers have explored the concept of stress in relation to the nursing profession (Sarafis et al., 2016; Sharma et al., 2014; Tuvesson, Elund &Wann-Hansson, 2012). In the literature reviewed, surveys and articles from the 1990s focused on the effects of stress on psychiatric nurses (Adriaenssens et al., 2014). However, the practice of nursing has evolved since that time. McVicar (2003) focused on identifying stress in nursing through an exhaustive literature review that focused on organizational interventions related to managing stress from January 1985 to April 2003. In her study, McVicar found that the emotional costs of caring have been the main sources of distress for nurses for many years, especially when the workplace and nursing roles were changing (McVicar, 2003). The Health and Safety Executive (HSE)

(2015) defines stress as an adverse reaction people have to excessive pressures or other types of demand placed upon them. Work-related stress is thus understood to occur when there is a mismatch between the demands of the job and the resources and capabilities of the individual worker to meet those demands (McVicar, 2015). Work stress among nurses is one of the core concerns in psychiatric nursing. According to the National Institute for Occupational Safety Health (NIOSH), nursing was found to be one of the jobs that when stress was left unconstrained and exceeded anticipated levels, it negatively impacted both the nurses' health and as well as their ability to cope with job demands (Adriaenssens, 2013).

Psychiatric nurses have historically assisted people in regaining a sense of coherence over what happens to them. Their unique contribution was a simple elegance of *being there* to bear witness and mitigate the negative side effects of illness alienation. Today, psychiatric nursing is being considered a stressful specialty, with low job satisfaction. According to Konstantinos and Christina (2016), psychiatric nurses are now important members of the multi-disciplinary team who cater to the needs of psychiatric patients in a therapeutic environment; however, they encounter situations in their careers such as shortages of nurses and unpredictable patient behaviors that are uncomfortable or distressing.

Current State of Practice

Nursing has been described as a psychologically demanding occupation with challenges that augment levels of stress and possible exhaustion (ANA, 2014). High levels of work-related stress experienced by psychiatric nurses have been recognized as a

regular event within the nursing profession (Zaki, 2016). Approaches to help psychiatric nurses cope with stress vary within different organizations, but the accessibility to an employee assistance program remains the same (Richmond, Pampel, Wood, & Nunes, 2017). Existing approaches have focused on encouraging personal relaxation, altering certain factors within the work environment, and promoting mentorship for nurses, which have produced positive outcomes (ANA, 2017). According to Happell et al. (2013), primary interventions to reduce stress among psychiatric nurses have involved modifying preventable stressors such as work environments according to local assessments.

Researchers investigating occupational stress for psychiatric nurses suggest managing stress by practicing mindfulness, which can benefit mental and physical well-being as well as reduce stress, improve focus and concentration, increase resilience, aid creativity, and increase emotional intelligence (Allen, Eby, Conley, Williamson, Mancini, & Mitchell, 2015). In recent years, many stress management interventions and mindfulness-based workplace programs have come to the aid of employees (Hyland, Lee, & Mills, 2015). When employees become overwhelmed, they may seek support from an employee assistance program. Employee assistance programs were initially intended to offer direction to staff members experiencing acute phases of alcohol or substance abuse, however, today these programs have incorporated issues with the workplace as well as home-related stress (U.S. Office of Personnel Management, 2017). Regrettably, these programs are not fully utilized as only 4-6% of employees explored the benefits (American Psychiatric Association (APA), 2016). Nurses may stay away from these

programs due to perceived stigmas regarding substance abuse or mental health issues (APA, 2016; Richmond et al., 2017).

Filling the Gap in Practice

Psychiatric nurses trying to cope with stress in an unsupportive environment promotes an environment of absenteeism, increased susceptibility to exhaustion, job dissatisfaction, and staff turnover (Kurnat-Thoma et al., 2017). The DNP project filled a gap in practice related to stress management for psychiatric nurses. The literature review illustrated that there are increasing levels of stress among psychiatric nurses (Hosseini at al., 2013; Mortaghi Ghasemi et al., 2012; Zaki, 2016). The project filled the gap in practice through the development of a synthesized evidence-based education program for psychiatric nurses. Strengthening psychiatric nurses' abilities to engage in healthy lifestyle behaviors can serve as a valuable tool in fighting negative workplace stress, promote enhanced work-life balance and personal well-being, and support the retention of competent nurses. The provision of an evidence-based educational program synthesized from best practices has enhanced the development of improved coping skills for this group of nurses.

Local Background and Context

Summary of Local Relevance

According to the leadership team at the project site, the issue of stress has been addressed in several leadership meetings and recognized as a problem at both the management and leadership levels. The absence of a formal stress management program to minimize stress was discussed in a grand round conference by management staff

members (Unit Manager, personal communication, 2017). Nevertheless, no formal interventions had been implemented. A callout checklist was created in an attempt to monitor the rate and frequency of employee callouts per shift. Review of this list revealed that more staff nurses call in sick every day as a result of stress related illnesses, more than other departments in the facility indicating that unhealthy levels of stress were present in the facility (Unit Manager, personal communication, April 2017; SGHC, 2018). No intervention has been implemented to address the issue; instead the facility has focused on hiring more nurses to address the staff shortage and to reduce employee overtime.

The project site, located in a metropolitan area in the Northeastern United States, is an acute inpatient psychiatric hospital that has undergone several changes in upper management within the past 3 years. The Chief Executive Officer (CEO) and the Chief Operational Officer (COO) have changed once and the Chief Nursing Officer (CNO) has changed twice. Two new Assistant Director of Nursing (ADON) positions were created to manage/oversee staffing, coordinate patient care, strengthen healthy lifestyle behaviors, combat negative workplace stress, promote improved work-life and personal well-being, and reduce attrition. Changes in upper management brought changes in organizational rules and regulations as well as new technology. The organizational change created fear among employees, impacting job satisfaction, performance, and productivity (ASSISTANT DIRECTOR OF NURSING, personal communication, June 2018). As a result, many nurses have lost confidence and fear the loss of job stability. They also fear that new changes will increase their workload and that they may not be

capable of learning how to use the new technology. Organizational leadership has not combated these fears or lessened their impact and as a result, several employees have become very dissatisfied, which has led to a rise in absenteeism (DIRECTOR OF PERFORMANCE IMPROVEMENT, personal communication, April 2018; SGHC, 2018). The nurses indicated that work stress increased because of the numerous changes in upper management and a more corporate focus for the organization (CHARGE NURSE, personal communication, April 2018). Organizational interventions to prevent work stress can be implemented to alleviate psychiatric nurses suffering from different aspect of stress with a focus on stress prevention for individuals as well as tackling organizational issues. Implementation of a management program can equip psychiatric nurses with skills to cope effectively with the stress (Sailaxmi & Lalitha, 2015). In addition, profits to the facility may occur as the avoidance and reduction of stress can diminish absenteeism, promote a less stressful work environment, impact productivity, and improve the quality of patient care (Goulart, 2015).

State and/or Federal Contexts

Work stress is acknowledged globally as a key challenge to workers' health and the well-being of their organizations (Zadi, 2016). Work stress can lead to physical illness, as well as psychological distress and mental illness (Nieuwenhuijsen, Bruinvels, Frings-Dresen, 2010). Narrative reviews have shown consistent evidence in the literature that work stress is linked with a variety of negative health outcomes, including cardiovascular disease, clinical depression, and death (Ganster & Rosen, 2013). The state and/or federal contexts such as scheduling, staffing, organizational support, increase

workload, interpersonal conflicts, lack of support, unfair treatment, low decision latitude, lack of appreciation, effort–reward imbalance, conflicting roles, lack of transparency, poor communication, and workplace violence are critical stressors in the workplace (Confederation of British Industry, 2013). Psychiatric nurses are exposed to strong stressors that come from the demand of their jobs (Chiang & Changa, 2012). Authors of numerous reviews and meta-analyses have examined the health effects of individual work-place stressors such as job insecurity (Virtanen, Nyberg, Batty, Jokela, Heikkilä, Fransson, & Kivimäki, 2013), long work hours (Bannai & Tamakoshi, 2014), psychological demands and job discretion (Kivimäki, Nyberg, Batty, Fransson, Heikkilā, Alfredsson, Theorell, T. (2012). Their findings revealed that work is one of the leading causes of stress with the physiological effects impacting cholesterol levels, the immune system, and metabolic functioning. Additionally, psychiatric nurses are leaving the profession due to reporting feelings of fatigue and the lack of ability to deliver quality patient care (Chiang & Changa, 2012).

According to the HSE report (2015), work stress is more common in public service institutions. Many state and federal settings have now realized that their employees' productivity is linked to their health and well-being (HSE, 2015). Most researchers agree that job stress results from the interaction of the worker and the conditions of work (Gulavani, 2014; Wang, 2015; Yoshizawa, 2016). The National Institute for Occupational Safety and Health (NIOSH) is the Federal agency responsible for conducting research and making recommendations for the prevention of work-related illness and injury. According to the NIOSH, exposure to stressful working conditions can

have a direct influence on worker safety and health. NIOSH is committed to providing organizations with knowledge to reduce stress. Many countries have laws that seek to more rigorously control work stress. The Department of Labor encourages employers to have an injury and illness prevention program (United States Department of Labor, 2017). The state also requires or encourages employers to have such programs (U.S. Office of Personnel Management, 2017). In the United States, the role of the work environment in employees' health has drawn some awareness through research sponsored by the NIOSH and Health Administration or the Agency for Healthcare Research and Quality (NIOSH, 2012). Most policy discussions and resources have remained devoted to promoting physical workplace safety and offering health promotion activities. Policies have been created to redesign jobs and reduce or eliminate workplace practices that induce stress (Goh, Pfeffer, & Zenios, 2015). The Occupational Safety and Health Administration (OSHA) is the federal agency charged with monitoring the work environment in the interest of work safety and health. Therefore, improving the organization's injury and illness prevention program can reduce the direct and the indirect costs of health care such as turnover, absenteeism, and presenteeism (Goh, Pfeffer, & Zenios, 2015).

The problem of stress in the project site is about the same as other healthcare organizations (SGHC, 2018), although work stressors can take different forms depending on the characteristics of the workplace and may be unique to an organization or an industry. According to the American Psychological Association (APA) (2017), more than one-third (36 percent) of workers in America said they typically feel stressed out during

their workday. Research by the NIOSH (2014) on workplace stress found that 75% of workers think they are experiencing more stress than previous generations. Several nurses reported that their average daily level of stress from work is an 8, 9, or 10 on a 10-point scale (Staff nurses' personal communication, June 2017). While the nurses' overall stress level remains about the same as compared to the national average, the project site nurses continue to call in sick from work (SGHC, 2018). The nature of work is changing at whirlwind speed, however, stress in the workplace may occur when people try to manage their responsibilities, everyday jobs or other demands related to their jobs, and experience some difficulties, tension, uneasiness, or become anxious as they perform their jobs (Stranks, 2015). Nurses caring for psychiatric patients may deal with strong interpersonal interactions, dynamic changes in patients, disturbing responsibility and psychological distress that can be very stressful and demanding (Sailaxmi & Lalitha, 2015). Based on the Transaction Model, stress is any stimulus that comes from the external or internal environment and taxes or exceeds the sources of adaptation of an individual or social system (Goulart, et al., 2015). If the mental and physical health of psychiatric nurses is not taken care of, they may experience mental health disorders, which can add unconstructive pressure on health care services and be a main contributor to attrition and extensive shortages in the nursing profession (Alidosti, 2016). Stopping and/or reducing stress in the workplace can promote the physical and mental health of workers and their quality of life at work. In addition, advantages to organizations are anticipated as the avoidance and reduction of stress can decrease absenteeism, promote a less stressful work environment, and impact both productivity and quality of work (Goulart, 2015).

Role of the DNP Student

This doctoral project has personal relevance because I have previously worked as a psychiatric staff nurse. Stressors experienced by psychiatric nurses are very personal and sometimes hard to share with other professionals. Effective management of stress can make a difference in the life of psychiatric nurses. Although I am presently not working as a psychiatric staff nurse, many of the challenges faced by them are similar to those challenges I encounter as a staff nurse. This project was visualized as informing a body of nursing knowledge for psychiatric nurses and others who may benefit from stress management.

Role in the Doctoral Project

Stress management interventions and wellness programs can help counter the stress and exhaustion professional nurses' experience, by promoting healthy lifestyle behaviors and strengthening their resilience (Neville & Cole, 2013**).** My role in this doctoral project is to develop an evidence-based educational program for psychiatric nurses to minimize stress. Within this project, I assumed the role of the project manager who compiled all the evidence-based best practices that focused on stress management. Evidence-based literature was synthesized and incorporated into an educational program that was presented to all the stakeholders in the organization for local relevance and approval. Once the stakeholders approved of the evidence-based educational program, it was presented to the nursing leadership counsel at the facility.

Being a part of this doctoral project allowed me the opportunity to work together with a variety of nurses and staff from other disciplines within the organization. There

have numerous encouraging discussions about the project with both front line and leadership/management level nurses. Interactions with these nurses boosted my level of confidence and improved my leadership skills, which is a lifelong process of leadership development. Participating in this project provided me with valuable teaching and learning experiences that has allowed me to be a role model for safe patient care using evidence-based practice. During my practicum experience, I had the opportunity to communicate with all the members of the treatment team. I made the most of this experience, which allowed me to build relationships with nurses and other staff members. During this time, I collected and developed a toolbox of resources that will enable me to take on any situation or challenge as a nurse leader. Development and evaluation of this project assisted me in understanding current knowledge and skill levels, as well as areas of needed improvement or reinforcement for managing psychiatric nurses work stress. The ability to translate knowledge that can effectively benefit psychiatric nurses in their daily demands of the practice environment provides a foundation for evolving nursing practice (Bjørk, Lomborg, Nielsen, Brynildsen, Frederiksen, Larsen, Reierson, Sommer, & Stenholt, 2013).

Motivations for the DNP Project

While working as a psychiatric staff nurse, I realized that psychiatric nursing is a highly-stress profession—emotionally demanding and physically challenging (Sarafis et al., 2016). I have recognized that some of the stressors in the workplace include poor inter-professional relationships, increased workload, staff shortages, lack of support, or positive feedback from nurse managers and supervisors (Yada, 2015). If psychiatric

nurses are not taken care of, they may experience mental health issues, which can have a negative impact on health care services and contribute to attrition and extensive staffing shortages (Alidosti, 2016). I was motivated by the stressful nature of psychiatric nursing to develop a stress management program that could assist psychiatric nurses in managing their physical, emotional, and mental exhaustion that can result from long-term involvement in work situations that are emotionally demanding. I also believe that in difficult and stressful working conditions, staff nurses should be motivated and supported in a proactive way to promote healthy behaviors and prevent illnesses. A safe work environment that enhances the quality of patient care and retains qualified nurses should be encouraged. Furthermore, I was motivated by my own sense of personal growth and advancement. My professional goal is to become a nurse leader who can develop and communicate a vision that gives meaning to the work of others who have a moral duty to treat and care for their patients in a professional way. Therefore, my goal for this project was to create stress management interventions that enhance the nursing work environment, a condition that is vital to the retention and recruitment of health care professionals and the sustainability of health systems (Pino & Rossini, 2012).

Potential Biases

Detection of possible biases is hard to envisage. I have worked as a staff nurse and I am knowledgeable regarding the challenging and diverse role of the psychiatric nurse. Nevertheless, there is always a possibility for potential bias with any project and therefore it is important to address. To address any potential bias, an evidence-based literature review was conducted in the development of this project. In addition,

information sources included evidence-based practices from independent health care organizations, peer-reviewed literature, and national nursing organizations. This project was reviewed and monitored by my project chair, and any source of information that was a potential bias was excluded from the project.

Role of the Project Team

Encouraging health promoting behaviors is a key factor in the promotion of physical, social and psychological well-being for nurses and preventing health problems (Chan & Perry, 2012). Promotion and use of healthy behaviors in front-line nurses can enhance their ability cope with job stress (Wright, 2014). The focus of this project was to develop an educational stress management program for psychiatric nurses and the psychiatric nurses working at the project site were significant members of the project team. The objective of this project was to encourage psychiatric nurses to participate in the educational program and to observe the program from the standpoint of an expert. Psychiatric nurses are professional in their everyday work stressors and how they manage their stress (Hasan, 2017). Nurses were encouraged to attend the project presentation so that they could appraise the educational program from their viewpoint. Psychiatric nurses in leadership and management positions also formed a vital part of the project team. Psychiatric nurses in leadership and management positions were encouraged to participate in the project presentation to gain their insight for managing work stress. All recognized stakeholders had the opportunity to evaluate the synthesized educational program and provide comments that served to enhance the program.

Processes

I developed and presented a PowerPoint on the educational program to the nursing leadership council at the project site. The stakeholders included the nurse supervisors/managers, staff nurses, and patients and were all invited and encouraged to attend the various sessions per their positions in the organization. Attending the presentation was essential to ensure unfettered review of the presentation and to provide the opportunity to ask questions in an unbiased setting. The schedules for the different presentation times were posted in prominent areas in the facility and announcements were made in the facility's bulletin. The maximum number of participants was limited to 15 nurses per session to encourage participants to fully engage while providing the opportunity to ask more personal questions. The goal was to offer approximately six presentation sessions. Offering six different presentation times allowed the different stakeholders to exercise the opportunity to attend at their convenience. Participation by all team members in this evidence-based stress management educational program enhanced the project as the team was able to contribute their knowledge, which was used to complete the project.

Team Member Input

The team members included the executive leaders, the project leader, project manager, the team leaders of any functional sub teams, and any critical subject matter experts. The working project teams participating in the project were viewed as proficient in their perception of stress. Team members had the chance to be present at one of the educational sessions and gave their perspective on the information presented. Time was

provided for participants to comment on the program. Also, participants were given the opportunity to send their comments/recommendations via emails. The idea behind allowing team members to email their comments/recommendations was to remove the likelihood of team members not participating or not making comments because of anxiety in the group setting. Recommendations from psychiatric nurses, about the stress management educational program, were integrated into the final project. Team members were encouraged to appraise the final project after recommended changes were incorporated.

Timelines

It was vital to establish a formal timeline for the completion of this project. Nevertheless, it was also essential to consider the work schedules of the participants. Invitations to participate were sent to psychiatric staff nurses, the various stakeholders, and nurses at the leadership council. The timeline was established within two weeks of receiving responses to the invitation. Once the established dates and times had been fixed, a formal presentation was held with a class capacity of at least ten attendees. Offering several presentations lessened scheduling conflicts, enhanced attendance, and improved the opportunity for group discussion and criticism. Nurses in the lead roles who decide to participate were asked to critique and offer recommendations for enhancement both during the presentation and within a week of the presentation date. The timeline was necessary as it incorporated time for a comprehensive review of the evidence, despite individual participant's schedule constraints.

Summary

Work stress is recognized throughout the world as a major challenge to workers' health and the welfare of their organizations. Work stress arises when nurses perceive that they cannot effectively deal with the demands being made on them or with the pressures that impact their safety. Stressed nurses are also more likely to be unhealthy, poorly motivated, less productive, and less safe at work. Stress at work continues to demand attention as it becomes more and more costly for both the individual and the institution. Educating psychiatric nurses to manage stress at work involves the establishment of an evidence-based educational program where an individual can learn how to cope positively with their work stressors. Coping with work stress is a learned behavior; however, existing evidence has shown that approaches exist to help guide nurses in this learning. Developing a synthesized educational program that enhances psychiatric nurses coping with workplace stressors can bridge the gap that exists between utilizing unhealthy approaches to manage work-related stress and applying evidence-based best practices in managing work stress. In this project, I assumed the role of a project manager and presented the evidence-based educational program to all the stakeholders. Team members in this project served as contextual experts on their perceptions of stress, offered recommendations for improvement, and evaluated the final proposal and education to assess compatibility within their organization.

Section three of the project identifies the sources of evidence that address the practice-focused questions and support the development of the project. Section three will also elaborate on the different databases, key search terms, and methods used for the

comprehensive literature review. Also, section three provides an overview of the project participants and procedures that were used to collect evidence. Furthermore, the strategies for protecting project participants and a description of analysis and synthesis procedures will be discussed.

Section 3: Collection and Analysis of Evidence

The responsibility of a psychiatric nurse in an inpatient mental health hospital has become multifaceted and stressful because of health care dynamics (Zaki, 2016). The dynamic changes of the patient, emotional liability and psychological distress may include exposure to aggressive/violent behaviors, emotional responsibility, and psychological distress that can be both stressful and challenging (Sailaxmi & Lalitha, 2015). Work stress impacts nurses' health, well-being, and job satisfaction (Khamisa, Peltzer, Ilic, & Oldenburg, 2016; Khamisa, Peltzer, Ilic, & Oldenburg, 2017; Sharma et al., 2014). Work stress can also have a negative impact on the degree of absenteeism and turnover rates among nurses (Mosadeghrad, 2013). Stressors are known to rise with the level of demand encountered (Zaki, 2016). The literature suggested that work stress is associated with musculoskeletal disorders (Azma et al., 2015; Lee et al., 2014), high rates of anxiety (Zandi et al., 2011), depression (Lin et al., 2016; Yoshizawa et al., 2016), reduced job satisfaction (Sharma et al., 2014), and high turnover rates (Mosadeghrad, 2013) and is negatively associated with nurses' patient care behaviors (Sarafis et al., 2016).

The practice at the project site involves psychiatric nurses creating nonspecific, unsuccessful coping strategies to manage their stress without any resources or systems in place. The purpose of this project was to design, implement, and evaluate an educational program focused on work stress to minimize or alleviate stress among psychiatric nurses at the project site. A single theoretical framework was insufficient to guide this project; therefore four transactional theories were incorporated. These included P-E fit theory, job

demand-control (support) theory, the JD-R model, and the ERI model, which were used to inform the definition of work-related stress and to clarify the causes and mechanisms that underpin work stress. The underlying principle among these theories is an imbalance between the perceived demands from the work environment and the individual's resources to meet those demands, which is defined as a lack of balance between demands and coping resources or between efforts and rewards (Siegrist & Li, 2016).

The staff education project was developed using Knowles's principles of adult learning (Kearsley, 2010), which were intended to encourage and support learners throughout the process by helping them to recognize their thought processes and strategies and offered a variety of options as evidence of successful learning outcomes. Knowles's principles were also intended to facilitate adult learning and encourage collaborative efforts and mutual respect among the facility, practitioners, and community partners. The project consisted of compiling and synthesizing evidence-based practices that focused on the reduction of work stress. The staff education program plan incorporated issues identified by the site's nursing leadership council, and end users were verified through a formative review using an anonymous questionnaire. The staff education project was presented via PowerPoint to these groups, and discussions were conducted to validate the content and ensure adoption. A second formative review was conducted after the staff education project. My role in this project was as a project manager. Section 3 of this project study addresses the practice-focused question, sources of evidence, analysis, synthesis of the related evidence used to guide this project, and summary.

Practice-Focused Question

Psychiatric nurses are influenced by many stressors resulting from their responsibility to provide quality patient care (Yaribeygi et al., 2017). In the absence of an established stress management program at the project site, patterns of excessive absenteeism and extended sick leave had been noted (Department of Nursing callout log, February, 2018). These nurses had received no formal stress management training, there was no access to established evidence-based coping strategies, and the organization did not provide any coping resources or systems. A gap in the practice and knowledge of evidence-based coping strategies existed among this group of psychiatric nurses. Therefore, the practice-focused question that was used to address this was the following: Can an evidence-based stress management education program empower psychiatric nurses to manage work-related stressors and decrease stress?

The purpose of knowledge clarification is to prepare psychiatric nurses to understand approaches for managing work stress. This educational program was intended to strengthen psychiatric nurses' abilities to engage in healthy lifestyle behaviors that may serve as a valuable tool in combating negative workplace stress and enhancing personal well-being (see Kurnat-Thoma et al., 2017; Vassey, 2014). The educational program included a PowerPoint presentation for the site's nursing leadership council, end users, and other key stakeholders. Staffs were given a pretest to determine their baseline level of knowledge and a posttest to determine the knowledge gained. A question-and-answer session was conducted with staff after completion of all presentations to address any doubts or concerns. The goals of the project team and the individual team members

aligned with the organization's objectives. The project was intended to close the gap in practice through the development of an evidence-based stress management educational program for psychiatric nurses that included a range of best practices offering nurses an opportunity to learn about successful techniques that may be implemented in their daily practice. Strengthening psychiatric nurses' abilities to engage in healthy stress management behaviors can serve as a valuable tool in combating negative workplace stress, improving personal well-being, and retaining qualified health care providers (Kelley et al., 2016; Khamisa et al., 2016). Promotion and the use of healthy behaviors in frontline nurses can enhance their ability to cope with work stress (Wright, 2014).

Sources of Evidence

The DNP manual provided guidelines for staff education and the sources of evidence to be used in the various stages of the project's development. The databases used for data gathering included CINAHL, EBSCOhost, ProQuest, MEDLINE, Science Direct, Nursing & Allied Health, Google Scholar, and Ovid Nursing Journals. Public websites such as the Centers for Disease Control and Prevention (CDC), Maryland Department of Health, and Centers for Medicare and Medicare Services were also referenced. The search terms and Boolean operators used were *work stress* OR *job stress* OR *occupational stress*, *mental health nurses* OR *psychiatric nurses*, and *stress management* OR *intervention* OR *rehabilitation* OR *prevention*. The years of publication were limited to 2011 to 2019. A wide-ranging, organized, and efficient review of literature was conducted through use of a literature review matrix.

The organization, analysis, and summary of the literature that focused on the effectiveness, appropriateness, and feasibility of the best practices for this project study were achieved through the use of Melnyk's hierarchy of evidence decision-making matrix (Melnyk & Fineout-Overholt, 2011). The decision-making matrix enabled me to sort and categorize different points or informational aspects related to work stress. The systematic review or meta-analysis of randomized controlled trials and evidence-based clinical practice guidelines, which are considered the strongest or highest level of evidence to guide clinical decisions (Melnyk, 2011), was used to guide this project. These studies were critically appraised and synthesized to deepen understanding and inform the practice-focused question. Enhanced knowledge and understanding of workplace stress and burnout within psychiatric hospitals may be used to make recommendations that have the potential to influence and promote higher quality patient care and decrease rates of turnover (see Vassey, 2014). The literature review included data originally published in English and excluded publications about work stress not related to nurses. The total number of articles reviewed was 76. The number of articles considered for this project was 15. I used an appropriate search strategy and appraised all articles using the Melnyk's hierarchy of evidence decision-making matrix, which facilitated a better understanding of the literature needed to support and inform this project. While appraising the articles and answering the practice focus questions, 15 articles were selected as the most relevant articles, which provided information or context for the project. From the relevant articles, the Melnyk's hierarchy of evidence decision-making matrix levels of evidence was used to choose an article that met the criteria for level I

evidence, which was the highest level of evidence-based research available (i.e., systematic reviews and meta-analysis) (Melnyk, 2011). The hierarchy of evidence matrix ensured that the highest level of evidence was selected first from the systematic review articles followed by articles from peer-reviewed journals in the various databases.

Stress is a vital part of our everyday challenges. It is one of the major psychosocial work risks and a problem and concern for both employees and employers (Tearle, 2013). Stressful situations can occur when a nurse realizes that the demands of a job are bigger than the ability to handle those demands for extended periods (Sarafis, Rousaki, Tsounis, Malliarou, Lahana, & Bamidis, 2016). Stress not managed can result in high levels of employee dissatisfaction, illness, absenteeism, high turnover, decreased productivity, and difficulty in providing quality patient care (Bang & Park, 2016; Tabaj et al., 2015; Zaki, 2016). Analysis of evidence-based practices revealed the following recommendations for employee assistance programs: modifying work practices through effective interpersonal communication; redesigning the work environment to reduce environmental stressors; using relaxation or meditation techniques; developing clear professional roles and improving organizational climate through communication, social support, shared vision, and feedback; reviewing the rotation of work shifts, and taking mental breaks from the stressor (Gardner, Hailey, Nguygen, Prichard, & Newcomb, 2017; Hewko, Brown, Fraser, Wong, & Cumings, 2015; Jones, McLaughlin, Gebbens, & Terhorst, 2015; Warshansky, Wiggins, & Rayens, 2016). Employee assistance programs (EAPs) provide support and resources for struggling employees to ensure that they are able to manage their stress and remain productive at work, even when faced with difficult

work experiences (Richmond, Pampel, Wood, Nunes, 2017). All psychiatric nurses should be advised about the EAP and given instructions about how to access these programs when they are stressed and need support. In addition, nurse managers can and should refer nurses to the EAP if they are unable to resolve the stress through on-the-job coaching and support. Essentially, these studies support the proposed project as an EAP designed intervention program that serves to identify and help employees resolve any stressful situation that interferes with the employee's ability to perform his or her work according to the organizational standards (Richmond et al., 2017). Hence, an EAP is recommended to encourage a positive work environment, increase productivity, and promote employee retention.

Ata and Dogan's study (2018) evaluated the effect of the Brief Cognitive Behavioral Stress Management Program (BCBSMP) on mental status, coping with stress attitude, and caregiver burden on psychiatric nurses while caring for patients with schizophrenia using a pretest/posttest control group model. The study included 61 caregivers who provided care for schizophrenia patients at a community mental health center. The caregivers in both groups were assessed using the Demographic Data Form, Zarit Caregiver Burden Scale, Coping Attitude Evaluation Scale, Stress Indicators Scale, and the General Health Survey-28 before and after the program. Results showed that stress indicators, risk of developing a psychological disorder, and caregiver burden decreased while skills related to both the problem-oriented and emotion-oriented aspects of stress increased in the study group after the program was completed (Ata & Dogan, 2018). The study is supportive of the proposed project as evidenced through the

recommendation that a psycho-educational program should be established for psychiatric nurses to help them learn how to cope positively with their stressors. In addition, training programs and courses on stress management can help psychiatric nurse to enhance their stress-bearing capacity and improve their work performance.

In a qualitative study to report mental health nurses' perspectives and experiences in a workplace resilience program, Foster et al. (2018) showed that resilience programs are a strength□based preventative approach to supporting nurses in overcoming workplace stress. Twenty□nine registered nurses from a metropolitan psychiatric service participated in an exploratory qualitative inquiry that utilized open□ended responses, semi□structured interviews, and focus groups. The analysis found four main themes: being confronted by adversity, reinforcing understandings of resilience, strengthening resilience, and applying resilience skills at work. Findings illustrated that resilience programs can help to improve nurses' self□efficacy and ability to realistically appraise stressful situations and to moderate their emotional responses to others. These findings are supportive of the proposed project as the incorporation of stress management strategies into clinical practice may help sustain beneficial outcomes that address workplace challenges. Crane and Searle (2016) recommended that resilience programs are provided to promote nurses' well□being and resilient practices. Hence, strengthening resilience involves understanding resilience and applying strategies such as positive self□talk, managing negative self□talk, detaching from stressful situations, being aware of and managing emotions, and showing more empathy.

A one group pretest and posttest design was used to test if a stress management program can equip nurses with skills to cope more effectively (Sailaxmi & Lalitha, 2015). The study used a group pretest and posttest design in which both genders of psychiatric nurses engaged in a stress management program that was comprised of 10 consecutive, one-hour sessions. Data was collected immediately after the intervention and then four weeks later using the DCL Stress scale (De Villiers, Carson & Leary Stress Scale). Results showed that preintervention stress levels were reduced significantly four weeks after the intervention. The findings align with the proposed doctoral project because stress management strategies positively impacted the nurses' stress levels. The ability to manage stress in the workplace can make the difference between success and failure on the job. Adopting stress management programs that educate employees about the sources of stress, effects on their health, and how they can reduce stress can be very effective. The knowledge gain from a stress management program can also motivate organizations to explore the stressors that are present in their own work environments, and take steps to reduce and/or prevent stress in the workplace, thereby working to maintain the health and well-being of the employees. The Health and Safety Executive (2015) recommends that organizational approaches coupled with individual strategies are the most effective way to address job stress. Adequate stress management can improve the health of nursing professionals and the quality of care they provide to patients.

To determine the prevalence and associated factors of job stress among nurses in primary health centers in Arar, Saudi Arabia Alanazi et al., 2019 designed a cross-sectional study of 101 nurses covering all local primary healthcare centers (n=12). Data

were collected using a self-administered questionnaire including demographic characteristics of nurses and a work stress questionnaire. Results revealed that time pressure; boredom-induced stress, pressure on the job, work under-load stress, and disagreement and indecision were the most common areas of work-related stress among nurses. One-third of the nurses indicated that they experienced work-related stress. According to Alanazi, nurses have a relatively high level of stress associated with their work environment, resources, workload, and time—all of which have been identified as major stressors. Sailaxmi and Lalitha (2015) suggested that management programs may equip nurses with skills to cope effectively with the stress. Preventing and minimizing stress at work can help the physical and mental health of nurses and their quality of life at work. In addition, managing nurses work stress also plays a crucial role in the organization since the prevention and minimization of stress can decrease absenteeism, encourage a less stressful work environment, impact productivity, and affect quality of work (Goulart, 2015). Alanazi et al.'s findings regarding the application of interventional programs to relieve sources of stress and additional stress management training are supportive of this project.

To evaluate the long-term effectiveness of modified brief assertiveness training with cognitive techniques for nurses, Yoshinaga et al. (2018) used a single-group study in which nurses received two 90-minute training sessions with a 1-month interval between sessions. The degree of assertiveness was assessed by using the Rathus Assertiveness Schedule (RAS) as the primary outcome, at four time points: pre- and post-training, 3-month follow-up, and 6-month follow-up. Results showed that a total of 33 nurses

received the training, and the mean RAS score improved from pre-training to post-training. These improvements were maintained until the 6-month follow-up. The pre-post effect size was larger than the effect sizes ranging from no effect reported in previous studies that used brief training. The study recommends that modified brief assertiveness training is feasible and may achieve long-term favorable outcomes in improving assertiveness among nurses Yoshinaga et al.'s findings are supportive of this project. According to Alberts and Hülsheger (2015), awareness of thoughts, awareness of bodily sensations and self-compassion help people to deal with stress. Hence, the implementation of assertiveness training is important because creating an open environment for communication leads to decreased stress, improved job satisfaction, improved nursing care, and increased patient safety.

Yang, Tang and Zhou (2018) examined stress experienced by psychiatric nurses by using mindfulness-based stress reduction (MBSR) therapy, which has had positive effects on work stress and can reduce anxiety, depression, other negative emotions, and improve mental health among psychiatric nurses. One hundred psychiatric nurses, including 68 females and 32 males, were selected as participants from three hospitals in the Hunan Province of China. These nurses were randomly distributed into the intervention and control groups, with 50 respondents in each group. MBSR therapy was used as psychological intervention in the intervention group. Before and after the intervention, the two groups were assessed with the Symptom Checklist-90 (SCL-90) scale, Self-Rating Depression Scale (SDS), Self-Rating Anxiety Scale (SAS), and Nursing Stress Scale. Results indicated that after the intervention, the SCL-90 score of

the intervention group showed a decrease in the symptom checklist. In addition, after the intervention, the SDS and SAS scores of the intervention group also showed a decrease in depression and anxiety respectively. Furthermore, the Nursing Stress Scale score of the intervention group also showed a decrease in stress levels. The findings align with this doctoral project since an effective preventive intervention may not only lead to the maintenance of a healthy mental state in nurses, but also better quality of care for inpatients. According to Shapiro, Wang, and Peltason (2015) mindfulness interventions in the workplace target workplace functioning such as stress reduction and improving decision-making, productivity, resilience, interpersonal communication, organizational relationships, perspective-taking, and self-care. Mindfulness-based interventions have the potential to improve nurses' health and work engagement and as a consequence, the quality of services provided to patients. Yang, Tang, and Zhou (2018) recommended that mindfulness-based stre**ss** management programs are effective for reducing depression and anxiety among psychiatric nurses. Hence, mindfulness skills may be the mediating factor for stress reduction.

To investigate the effects of an internet-based cognitive behavioral therapy (iCBT) program on depressive symptoms among nurses in Japan Kuribayashi et al. (2019) designed a RCT to verify the effectiveness of the program in improving depressive symptoms. Data was collected via online questionnaires. The iCBT program consisted of six modules, covering different components of a cognitive behavioral therapy (CBT), the transactional stress model, self-monitoring skills, behavioral activation skills, cognitive restructuring skills, relaxation skills, and problem-solving

skills. Participants in the intervention group were asked to read the modules within 9 weeks. Results were assessed three times using the Beck Depression Inventory-II (BDI-II). At the baseline, three, and six-month follow-ups the iCBT intervention significantly improved occupational stress among hospital nurses. These findings suggest that work-related stress interventions can be effective in improving depressive symptoms and other work-related outcomes among nurses. The findings support this project as the cognitive-behavioral therapy for stress management may be an appropriate strategy for improving personality constructs (Kuribayashi et al., 2019). CBT focuses on how a person's thoughts, beliefs, and attitudes affect their feelings and behaviors. CBT can have a positive impact on how nurses feel, act, and equip themselves with coping strategies that help them deal with challenges.

The subjective concept of nurses' well-being and experience of psychiatric problems among psychiatric nurses in the United Kingdom was explored by Oates (2018). Data were collected from a survey of 237 psychiatric nurses about their mental health and well-being, and 27 psychiatric nurses were interviewed regarding their personal experiences. Results showed that the nurses used strategies such as physical exercise, mindfulness practice, spending time in nature, and listening to music to improve their well-being. The support this doctoral project since mindfulness practices can be an alternative and complementary therapeutic approach for stress reduction among psychiatric nurses and opportunities to take part in activities can improve staff well-being through shared initiatives. Mindfulness in a relationship is about observing what the other person is doing in a non-judgmental way. Oates suggests that mindfulness practices are a

promising modality for stress management among healthy individuals. Hence, all stress management programs should include mindfulness practices as one of the approaches for stress reduction.

Evidence Generated for the Project

The participants for this project included all 61 psychiatric nurses on the 14 units. The psychiatric nurses included all merit nurses, as well as contractual and float pull nurses, who work 8 or 12-hour shifts. The clinical experience of the nurses ranged from one to more than 15 years. The project exclusion criteria included nurses who were on extended sick leave or who were absent at the time of implementation. However, staff not present during the implementation phase received the educational information when they returned to work. Auxiliary staff members such as the direct care assistant and patient crisis intervention staff were not included.

Procedures

After receiving approval from the Institutional Review Board, I began the first phase of the project. Prior to the project being developed, discussions with senior management/leadership were conducted concerning the high rates of absenteeism and work stress, and they requested that I develop an educational program that would minimize stress and decrease absenteeism. Senior management encouraged nurses to participate in the stress management program in the training phase. A project team consisting of representatives from psychiatric staff nurses, nurse managers, nurse supervisors, and support nurses was formed. That team was involved in the overall program planning, implementation, follow up, and evaluation. Maximum participation

was encouraged through the distribution of posters and newsletters. Meetings were also held to create greater awareness of the comprehensive stress management program. I obtained the deidentified data regarding callouts and absenteeism for thirty-days from the nursing administration office before the implementation of the educational intervention. I downloaded the data into an Excel spreadsheet and stored the collected data on my personal computer, which was password protected and kept in a private, locked office. The nurse manager in the nursing office and the preceptor of the project manager had access to the data.

After collecting the data, I compiled educational information for stress management practices/techniques from the American Heart Association into educational flyers and handouts that was presented to the nursing leadership council for feedback and approval. The content of the handouts included stress management and how to reduce, prevent, and cope with stress. The flyers showed pictures that were designed to increase the understanding of how to manage and cope with stress. The handout was used during various presentation sessions. Once the educational material was approved, the nurses from the 14 units were informed about the project. Flyers with dates and times were placed in all 14 units to remind nurses about the learning sessions.

A 10-point multiple-choice, perceived stress questionnaire obtained from the American Sociological Association (Appendix A) was used to assess the nurses' knowledge before the educational intervention. The pretest paper questionnaire and pencils were distributed to the participants in the unit conference room prior to the educational presentation. The participants were given 15 minutes to complete the pretest.

Upon completion, the participants placed their responses in an envelope labeled Pretest, which was collected by the unit manager. The envelope was then sealed, placed, and stored in a secure filing cabinet located in a private, locked office. The data collected from the completed pretest questionnaires was then uploaded into the password protected computer in my home office, which was only accessible to myself. After the data was uploaded into an Excel file**,** the paper questionnaires were destroyed. All data was analyzed by myself using descriptive statistics.

The education sessions were held during all three shifts in the unit conference room, thus providing attendance opportunities for all of the psychiatric nurses. The stress management educational content was presented in a PowerPoint presentation that lasted for 30–45 minutes. During these sessions, information about stress and stress management practices in the form of handouts was provided. After the education sessions, a 10–15 minute question-and-answer session was conducted. The entire session lasted 45–60 minutes. A checklist was presented at every educational presentation and staffs were asked to sign-in. The purpose of the checklist was to ensure that all employees were accounted for.

One month after the completion of the presentation, the PSS paper-pencil questionnaires were once again administered as a post-test to all the staff, taking no more than 10–15 minutes to complete. Upon completion, the participants placed their responses in an envelope labeled Posttest, which was collected by the unit manager. The envelope was then sealed, placed, and stored in a secure filing cabinet located in a private, locked office. The data collected from the completed posttest questionnaires was

then uploaded into the password protected computer in my home office which was only accessible to myself until the time of analysis. After the data was uploaded into an Excel file, the paper questionnaires were then destroyed. The data was analyzed by me using descriptive statistics.

One month after completing the educational presentation, I obtained a one-month prospective, deidentified data set of the callouts or absenteeism for a thirty-day period from the nursing administration office. The data was provided by the nurse manager in the nursing administration office via confidential email. The data included the number of callouts or absenteeism per month and was uploaded into the password protected computer in my home office. The data was then compared to the deidentified data of the number of callouts/absenteeism obtained for the thirty-days before the educational intervention. The data was analyzed to assess whether there was a reduction in the participants' level of work stress over a 30-day period after exposure to the educational intervention.

Instruments

The Cohen 10-item Perceived Stress Scale (Cohen PSS-10) questionnaire is the most widely used psychological instrument for measuring the perception of stress (Taylor, 2015). Cohen PSS-10 was developed by Cohen and Williamson (1988). The scale measures the degree to which situations in one's life are appraised as stressful. The original Perceived Stress Scale consisted of 14 items that formed a one-dimensional scale of globally perceived stress; however, the Cohen 10-item form is more commonly administered (Taylor, 2015), and was used as the instrument for this project. The

questions in the scale ask about feelings and thoughts during the last month and in each case, respondents were asked how often they felt a certain way. The items are designed to show how unpredictable, uncontrollable, and overloaded respondents find their lives. The items are easy to understand, and the response alternatives are simple to grasp. The scale also includes a number of direct queries about current levels of experienced stress (Cohen & Williamson, 1988). The ten questions presented in the pre- and posttests were modified to pertain specifically to psychiatric nurses and the patient population they serve. The word *at work* was added at the end of each question in the scale. The modification of the PSS questionnaires was made by myself and it did not affect the reliability and validity of the instrument. Participants endorsed each item on a 4-point Likert scale with responses that ranged from 0 = Never; 1 = Almost Never; 2 = Sometimes 3 = Fairly Often; 4 = Very Often. Total stress scores were calculated by summing the responses and ranged from 0 to 40, with higher scores reflecting higher states of perceived stress. Scores ranging from 0–13, 14–26, and 27–40 indicate low stress, moderate stress, and high perceived stress, respectively (Cohen, 1988). The Cohen Perceived Stress Scale is used widely across various countries. The PSS-10 has good internal consistency and reliability (Baik, Fox, Mills, Roesch, Sadler, Klonoff, & Malcarne, 2017; Denovan, Dagnall, Dhingra, & Grogan, 2017). PSS-10 has been used as a valid and reliable instrument to measure perceived stress in adults with asthma (Khalili, Sirati, Ebadi, Travallai, & Habibi (2017). It has also been used to understand the experience of stress among older adults.

Analysis/Synthesis

Data collected from the Perceived Stress Scale as the pretest and the posttest was analyzed by myself using descriptive statistics and the findings synthesized. Participants' scores were loaded in an Excel spreadsheet to evaluate the differences in stress scores before and after the educational presentation. The goal was to see at least a 20% decrease in stress scores after one month of the educational presentation. The pre- and posttest questionnaires were compiled at the end of each session to ensure that all tests were returned and placed in a sealed envelope labeled with the appropriate Pretest or Posttest label. Nurses on approved sick leave were eliminated from the participant population to alleviate outliers. The deidentified 1-month retrospective callout/absenteeism data was examined to determine the percentage of nurses identified at risk for, or experiencing, stress out of the total number of nurses working within the one month prior to the educational intervention. Retrospective data was obtained from the number of nurses who called out sick or were absent a month prior to the intervention. Prospective data was also obtained from the number of nurses who called out sick/were absent a month after the educational intervention. Both the retrospective and prospective data were uploaded to a Microsoft Excel spreadsheet. The number of callout/absenteeism days before and after the educational intervention was then reviewed and compared using descriptive statistics. The pretest and posttest scores were also uploaded to an Excel spreadsheet and descriptive statistics were used to compare the pretest and posttest scores. The overall mean score percentages of the nurses from the PSS pretest and posttest was also compared using descriptive statistics.

Summary

Psychiatric nurses experience a significant amount of stress at the workplace, which has a negative impact on their health and work performance (Ahanchian, Meshkinyazd, & Soudmand, 2015). With the addition of the educational program, the psychiatric nurses gained information and tools needed to manage the myriad of stressors that impact their work lives. The educational presentation provided a mechanism for them to access the intervention at times and places convenient to their busy and often stressful schedules. Education was provided to all psychiatric nurses working in the various units of the in-patient psychiatric hospital during a 60-minute verbal presentation. During the presentation, psychiatric nurses were given pretest questionnaires and a month after the presentation a posttest questionnaire was administered. Furthermore, nurses were encouraged to participate in the discussions and a question-and-answer session was provided to clarify any vague information. The evidence gathered from organizational operations and the deidentified retrospective and prospective absenteeism data provided the PSS pre- and posttest education that nurses receive as soon as they are employed to the organization along with identifying the increase or decrease in number of callout/absenteeism. The instrument that was used to assist in gathering this data was the Cohen-10 Perceived Stress Scale, a classic stress assessment instrument used to measure individual stress levels, and is considered to be a reliable and valid tool to measure individual stress levels (Lee, & Jeong, 2019; Lee, 2012; Sun, Gao, Kan, & Shi, 2019). Data collection consisted of the pre- and posttest questionnaires and the PSS. Analysis and synthesis of data collected was entered into an Excel spreadsheet database on a

password protected computer, which was only accessible to myself, and analysis was performed using descriptive statistics. Section 4 will discuss the project findings and recommendations, which have the potential to influence psychiatric nurses after the implementation of the proposed project.

Section 4: Findings and Recommendations

Psychiatric nursing is viewed as one of the most stressful occupations in the world. Psychiatric nursing is physically and psychologically demanding, especially for nurses faced with a specialized work burden and the dangers associated with job stress. Psychiatric nurses work long hours performing physically and mentally fatiguing duties that can affect their well-being (Omori, 2015). Work stress and successful coping tactics have been associated with the nurses' level of well-being (Chana, Kennedy, & Chessell, 2015). Increased levels of nurse stress impact the nursing profession and health care. Stress has been linked to low job satisfaction; poor quality in work relationships, collaboration, and ability to provide high-quality patient care; poor work engagement; and increased absenteeism and turnover (Chana et al., 2015; Hall, Johnson, Watt, Tsipa, & O'Connor, 2016).

The local problem addressed in this DNP project involved practicing psychiatric nurses' use of nonspecific unsuccessful coping strategies to manage their stress in the absence of a stress management program. There had been an increase in callouts/absenteeism and turnover at the project site, which increased from 11% to 15% in 2016. The gap in practice addressed by this project was the lack of a recognized educational program or resources at the project site to provide psychiatric nurses with stress management interventions to decrease daily work-related stress. Methods used to manage stress were often not evidence based, which led to ineffective stress management. Additionally, some nurses reported leaving the organization as a result of excessive stress

caused by a high workload, understaffing, and lack of support or positive feedback from managers and supervisors.

The practice-focused question guiding this project was: Can an evidence-based stress management education program decrease stress and absenteeism among practicing psychiatric nurses at the project site? Stress management interventions corresponding to secondary and tertiary prevention have been shown to decrease stress and improve well-being (Czabała et al., 2011). Employee assistance programs including modifying work practices through effective interpersonal communication; redesigning the work environment to reduce environmental stressors; using relaxation or meditation techniques; developing clear professional roles and improving organizational climate through communication, social support, shared vision, and feedback; reviewing the rotation of work shifts; and taking mental breaks from the stressor have been shown to decrease stress, encourage a positive work environment, increase productivity, and promote employee retention (Gardner et al., 2017; Hewko et al., 2015; Jones et al., 2015; Richmond et al., 2017; Warshansky, Wiggins, & Rayens, 2016). Psycho-educational programs (Ata &

Dogan, 2018), resilience programs (Foster et al., 2018), assertiveness training (Yoshinaga et al., 2018), and mindfulness-based stress management programs (Oates, 2018; J. Yang et al., 2018) have also been shown to decrease stress and provide a positive impact on how nurses feel and act while equipping them with coping strategies to help them deal with challenges.

The purpose of the project was to design, implement, and evaluate a stress management educational program that focused on work stress among practicing psychiatric nurses to assist them in reducing levels of stress and absenteeism. The project sought to encourage a culture of awareness and mindfulness about work stress, facilitate practicing psychiatric nurses' management of their work stress to promote health/well-being and decreased absenteeism, and has a positive effect on productivity and the quality of patient care. Nurses' absenteeism affects patient care outcomes and can increase patients' length of stay in the hospital due to high workload and low morale of the remaining on-duty nurses.

The sources of evidence for this project included the PSS-10 questionnaire obtained from the American Sociological Association (see Appendix A), for measuring the perception of stress. The instrument was used for measuring nonspecific perceived stress and for assessing the effectiveness of stress-reducing interventions. The instrument measures the degree to which situations in a person's life are appraised as stressful.

In addition, evidence for this project was obtained from the review of literature that focused on the effectiveness, appropriateness, and feasibility of the best practices for this capstone project through the use of Melnyk's hierarchy of evidence decision-making matrix (Melnyk & Fineout-Overholt, 2011). The decision-making matrix enabled me to be able to sort and categorize different points or informational aspects related to work stress. Data analysis was done using the IBM SPSS Version 25. Descriptive statistical procedures used to analyze the data included frequency distribution for gender, age, and pre- and poststress management education. A dependent group, paired sample *t* test was

used for the PSS to determine whether there was a statistically significant difference between the mean pre- and posttest scores for perceived work stress assessment questions.

Findings and Implications

After receiving approval from the Walden University Institutional Review Board, I started the first phase of the project. Before developing the project, I had discussions with the senior management/leadership team about the high rates of absenteeism and work stress in the facility. They requested that I develop an educational program that would minimize stress and decrease absenteeism. I formed a program team involving psychiatric staff nurses, nurse managers, nurse supervisors, and support nurses who were involved in the program planning, implementation, follow-up, and evaluation. Maximum participation was encouraged through the distribution of posters and newsletters. I conducted team meetings to create greater awareness of the comprehensive stress management program and to discuss the resources and skills available for running the program. I obtained de-identified retrospective data of the number of callouts or absenteeism for 30 days from the nursing administration office before the implementation of the educational intervention (see Appendix B). I downloaded the data in an Excel spreadsheet and stored the data on my personal computer, which was password protected and kept in a private, locked office.

Demographic Data of Respondents

Sixty-five participants attended the program, but three dropped out and provided no reason for leaving. One direct care assistant said she was not interested in the program

because she did not perceive herself as experiencing work stress. A total of 61 nurses (51 females and 10 males) participated in the stress management education program (see Table 1). Most of the participants were female, 51-60 years of age, and in the job classification of registered nurse charge (RNC). The age range may have been the result of older nurses being the most skilled and productive employees (see Clendon & Walker, 2015). Many older nurses favor flexible working arrangements to manage their home and work responsibilities. In addition, older nurses take their work more seriously, and take fewer sick days than younger nurses (Kottwittz, 2018). Nurses on approved sick leave were eliminated from the participant population to alleviate outliers.

Table 1

Demographics of Respondents

Demographic	Number of nurses	Percentage (%)
Age range		
20-30	3	4.90
31-40	8	13.11
41-50	17	27.90
51-60	21	34.42
61-70	12	19.67
Gender		
Male	51	83.6
Female	10	16.4
Classification		
DCA	17	27.9
LPN	5	8.2
RN	9	14.8
RNC	23	37.7
RNS	7	11.5

Note. Key: DCA-Direct Care Nursing Assistant; LPN-License Practical Nurse; RN-Registered Nurse; RNC Registered Nurse Charge; RNS- Registered Nurse Supervisor.

The de-identified 1-month retrospective callout/absenteeism data was examined to determine the percentage of nurses identified at risk for or experiencing stress out of the total number of nurses working within the one month prior to the educational intervention. All the respondents (100%) had called out at least once in the month before the intervention, implying that the nurses were all experiencing work stress (Table 2). Five of the nurses had called out once in a month (8.2%). Eleven of the nurses each called out twice in a month (18.0%). The majority of the nurses (14) had called out five times (23.0%) in the month prior to the educational intervention. 61 respondents called out 36 times in the month prior to the educational intervention. The total percent of callouts in the month (100%) is an indication that nurses at the project site are very stressed, which is one of the most common causes for unscheduled absences in the job and organization (Gangai, 2014; Kanwal, Riaz, Riaz, & Safdar, 2013).

Table 2

Absenteeism One Month Before Educational Intervention

Number of nurses who callout in a month	Frequency of callout in a month	Percent of callout in a month
5	1	8.2
11	2	18.0
13	3	21.3
8	4	13.1
14	5	23.0
4	6	6.6
4	7	6.6
2	8	3.3
Total 61	36	100.1

Most of the callouts were among the RNC who had 86 callouts and the DCA who had 64 callouts per month before the educational intervention (Table 3). The increase

number of callouts among the RNC and the DCA may be the result of these nurses having a wide area of responsibility and workload. DCAs typically spend more time interacting with patients promoting patient safety and well-being than the charge nurses or registered nurses, who play a pivotal role in the promotion, maintenance and restoration of patients' health and well-being. One hundred percent of the nurses who participated in the project had a total of 253 callouts in the month before the educational intervention.

Table 3

Callout per Classification One Month Before Education Intervention

Nurse classification	Number of nurses	Percentage of nurses	Number of callout per month
DCA	17	27.9	64
LPN	5	8.2	17
RN	9	14.8	37
RNC	23	37.7	86
RNS	7	11.5	49
Total	61	100.0	253

The design used for this project was a before and after approach, which started with educating the psychiatric nurses to avoid work stress and decrease absenteeism. The PSS questionnaire was administered to the psychiatric nurses from all 14 units at the project site. A 10-point multiple-choice format perceived stress questionnaire obtained from the American Sociological Association (Appendix A) was used to assess the nurses' knowledge before the educational intervention. The pretest paper questionnaire and

pencils were distributed to the participants in the unit conference room prior to the educational presentation. The participants were given 15 minutes to complete the pretest. Upon completion, the participants placed their responses in an envelope labeled Pretest, which was collected by the unit manager. The envelope was then sealed, placed, and stored in a secure filing cabinet located in a private, locked office. The data collected from the completed pretest questionnaires was then uploaded into the password protected computer in my home office, which was only accessible to myself until analysis. After the data were uploaded in an Excel, the paper questionnaires were destroyed (Appendix C). The data was analyzed by me using descriptive statistics.

Perceived work stress was measured with a Likert scale. Individual scores on the PSS can range from 0 to 40 with higher scores indicating higher perceived stress. Scores ranging from 0–13, 14–26 and 27–40 are considered low stress, moderate stress and high stress, respectively. The results from the pretest indicated that all the participants had been very stressed and that 93.44% of respondents had high stress in the month prior to the educational intervention (Table 4). None of the respondents had low stress, and 6.56% of the respondents were moderately stressed. The various stress levels of the respondents may be linked to increased levels of work stress as reported by the respondents facing challenges which were associated with their perception of having little control, but lots of demands in the workplace.

Table 4

Nurses' Baseline Knowledge of Perceived Work Stress Before Educational Intervention

Perceived stress level	Number of nurses with work stress	Percentage of nurses with perceived work stress
0–13	0	0.00
14–26	4	6.56
27–40	57	93.44
Total	61	100.00

After collecting the data, I compiled the educational information for stress management practices/techniques from the American Heart Association (n.d) into educational flyers and handouts that was presented to the nursing leadership council for feedback and approval. The content of the handouts included stress management including how to reduce, prevent, and cope with stress. The flyers showed pictures to increase the understanding of how to manage and cope with stress. The handout was used during the various presentation sessions. Once the educational material was approved, the nurses from the 14 units were informed about the project. Flyers with dates and times were placed in all 14 units to remind nurses about the learning sessions.

The education sessions were held during all three shifts in the unit conference room, thus providing attendance opportunities for all of the psychiatric nurses. The stress management educational content was presented in a PowerPoint presentation that lasted for at least 30 minutes. During these sessions, information about stress and stress management practices in the form of handouts was provided. The content of the educational presentation was stress reduction techniques that constituted a safe and

effective approach for reducing stress and how nurses experiencing stress or stress-related symptoms could benefit from the various stress management techniques. These techniques included deep breathing exercises, which have been successfully used to decrease fatigue and reduce anxiety in the management of acute stressful tasks as well as meditation and relaxation techniques. These stress management techniques provide the same benefits of maintaining inner peace, and a sense of calm and balance that can benefit both the emotional well-being and the overall health of the nurse (Etim, Bassey, & Ndep, 2015). The stress reduction techniques (Appendices F and G) are therapeutic for healthcare providers, enhance interactions with patients, and improve the providers quality of life (D'Souza, Umarani, Shetty, & Asha, 2015; Etim, Bassey, & Ndep, 2015). After the education sessions, a 10-15 minute question-and-answer session was conducted. The entire session lasted 45 minutes. A roster was presented at every educational presentation and staffs were asked to sign-in. The purpose of the roster, kept by the unit manager, was to ensure that all employees were accounted for.

One month after the completion of the presentation, the PSS paper-pencil questionnaires were administered again as a posttest to all present staff. The posttest and pencils were distributed on all shifts to the participants in the unit conference room. The participants were given 15 minutes to complete the posttest. Upon completion, the participants placed their responses in an envelope labeled Posttest, which was collected by the unit manager. The envelope was sealed, placed, and stored in a secure filing cabinet located in a private, locked office. The data collected from the completed post-test questionnaires was then uploaded into the password protected computer in my home

office which was only accessible to myself until analysis was initiated. After the data was uploaded in an Excel file, the paper questionnaires were destroyed. The data was analyzed by me using descriptive statistics. The pre- and posttest questionnaires were compiled at the end of each session to ensure that all tests were returned and placed in a sealed envelope labeled with the appropriate Pretest or Posttest label.

When all the posttest responses on perceived work stress were reviewed, data showed that 9.84% of the nurses had low level of perceived work stress (Table 5). 90.16% of the staff had moderate levels of perceived work stress in the month after the educational intervention. None of the respondents had high levels of perceived work stress in the month after the educational intervention. The results may be linked to nurses' awareness and involvement towards achieving a common goal, which was to reduce stress, promote health, and well-being and a stronger affective commitment.

Table 5

Nurses' Knowledge Gain on Perceived Work Stress After Educational Intervention

Perceived stress scores	Number of nurses perceived work stress	Percent of nurses perceived work stress
0–13	6	9.84
14–26	55	90.16
27–40	0	0.00
Total	61	100.00

Participants' scores were loaded in an Excel spreadsheet to evaluate the differences in stress scores after the educational presentation. The goal was to see at least a 20% decrease in stress scores after one month of the educational presentation. The

results from the comparison of the Pre-and Post-test questionnaires found that the staff perceived an 83.6% decrease in moderate perceived work stress, and 93.44% decrease in high perceived work stress. None of the staff experienced a high perceived work stress after the educational intervention. The results show a remarkable improved level of low (9.84%), medium (90.16%), and high (0%) stress after the educational intervention. The results also show a significant difference from the original goal of 20% stress reduction implying that most of the nurses have gained knowledge regarding the management of work stress that can decrease absenteeism/callouts.

One month after completing the educational presentation, I obtained a one month prospective de-identified data of the number of callouts or absenteeism for thirty-days from the nursing administration office. The data was provided by the nurse manager in the nursing administration office via confidential email. The data included the number of callouts or absenteeism per month and was uploaded into the password protected computer in my home office. The data was then compared to the de-identified data of the number of callouts or absenteeism obtained for the thirty-days before the educational intervention. The data was analyzed to assess whether there was a reduction in the participants' level of work stress over a 30-day period after exposure to educational interventions.

The majority of the nurses to include nurses from all categories (49.2%) did not call out one month after the educational intervention, and few nurses from all categories (8.2%) called out more than twice in a month. The total frequency of callouts per month after the educational intervention was 6. Among these 6 callouts, 15 nurses only called

out once (26.2%), 10 nurses called out twice (16.4%), and only 5 nurses called out 3 times (8.2%) in the month after the educational intervention (Table 6). The reduction in the number of callouts after the educational intervention is an indication that nurses have gained knowledge to effectively manage their work stress.

Table 6

Callouts One Month After Educational Intervention

Number of nurses who callout in a month	Frequency of callout in a month	Percent of callout in a month
30	0	49.2
15	1	26.2
10	2	16.4
5	3	8.2

One month after the educational intervention, the number of callouts per nurse classification improved (Table 7). There was no callouts from the LPN classification. The zero callouts in the LPN classification may be attributed to their roles in the facility in which two LPNs are assigned to only administer medications to about 24 patients. Reducing their workload made them feel that their work is valued and flexible. RN and RNS classifications had 6 and 7 callouts respectively. The RNC classification had the majority (23) of the callouts per month after the educational intervention. The increase in the number of callouts in this classification can be attributed to the fact that charge nurses supervise and support other staff while also taking care of a limited number of patients. Charge nurses are also responsible for maintaining a high level of patient care, evaluating other nurses, and acting as an educational resource for other nurses. The decrease in the

total number of callouts (from 253 callouts before the educational intervention to 51 callouts after) surpassed the initial goal of a 20% improvement, implying that the stress management educational program provided practical information to the nurses.

Table 7

Callouts per Classification One Month After Education Intervention

Nurse classification	Number of nurses	Percentage of nurses	Number of callouts per month
DCA	17	27.9	15
LPN	5	8.2	0
RN	9	14.8	6
RNC	23	37.7	23
RNS	7	11.5	7
Total	61	100.0	51

There was also an overall improvement in the mean scores of the stress level and the number of callouts. The paired samples t-test showed that there is a significant difference in scores for the pretest and post-test (Table 8). The mean scores of the stress level decreased to approximately half the initial score, from 33.57 one month before the educational intervention to 17.80 one month after the educational intervention. The mean scores for callouts also decreased significantly, from 3.87 to 0.84 one month after the educational intervention. There was also a significant improvement between the pre-and poststress level mean for perceive work stress. When the stress levels were high, there was a tendency for the staff to call out more frequently, and vice versa. The association between stress and the number of callouts shows that nurses' stress levels likely play an

important role in regulating the rate of callouts. Perceived work stress may also be associated with high levels of callouts.

Table 8

Pre-and Post-Stress Scores and Callouts Before and After Educational Intervention

Paired samples statistics		Mean	N	Standard. deviation	Standard. error
Pair 1	Pre-Stress scores	33.57	61	5.201	.666
	Post Stress scores	17.80	61	2.744	.351
Pair 2	# of Callouts before	3.87	61	1.821	.233
	# of Callouts after	.84	61	.986	.126

As with most callout data, there was no information on the reasons for the callout. The lack of information for absence is consistent with published findings that identified a positive impact related to stress management programs, coping with stress attitudes, and caregiver burden on psychiatric nurses (Ata & Dogan, 2018). According to Sailaxmi and Lalitha (2015), stress management programs may equip nurses with skills to cope more effectively. Ultimately, stress management programs have the potential to positively impact nurses' stress levels and decrease callouts/absenteeism (D'Souza, Umarani, & Shetty Asha, 2015). The tremendous decrease in the number of callouts after the educational intervention may be related to the COVID-19 pandemic incentives, which were implemented to encourage nurses to go into work. In addition, the facility had introduced a practice of giving intangible rewards, such as posting names of nurses with

good attendance on the bulletin board and giving credit to nurses who showed some improvement regarding their attendance. Such behaviors also enhanced the continuance commitment of nurses to show up for work. Of the 61 participants who attended the stress management education program, none had previously used any specific stress management techniques to manage their stress levels. At the completion of the program, all participants indicated that they were using various stress management techniques.

Unanticipated Limitations/Outcomes

Some unanticipated limitations/outcomes occurred during the implementation of the project. The number of participants was limited because many patients were on 1:1 observation for suicidal or homicidal precautions, and staff had to stay to those patients. Although the program was offered at different times to make it easier for nurses to participate, none of the nurse managers or assistant directors of nursing attended the sessions. Over half of the participants were either RNCs (37.7%) or DCAs (27.9%). Participant feedback highlighted the challenge of incorporating and attending the classes due to busy work and personal schedules (see McCarthy, Trougakos, & Cheng, 2016; Qin et al., 2016).

Individuals

Decreasing callouts through a stress management education program had a number of positive implications for the participants. On an individual level, nurses had an increased awareness of stress management techniques. Participants acknowledged that they were able to manage their stress better as a result of the educational program, and the PSS scores for stress level showed a significant positive difference at the completion

of the program. Psychiatric nurses can integrate stress management techniques into their workplace. Effectively managing work stress can improve the overall health of the nurses and enhance productivity. This program provided the participants with the fundamental information and skills to impact their entire work environment. One charge nurse (RN**)** commented that she will begin engaging in walking exercises during her lunch break in order to reduce stress, giving her a mental break from work. Another direct care assistant shared that doing these walking exercises with co-workers supports both the physical and mental benefits of socialization. According to CDC (2014), one of the goals of Healthy People 2020 is physical activity, as any activity including walking can improve an individual's health, quality of life, and also reduces work stress.

Communities

Decreasing callout and absenteeism through a stress management education program had positive implications for the community. At the community level, well managed stress levels improved the nurses' well-being and enhanced patient care outcomes and patient satisfaction. Nurses with effective stress management tend to come to work, are more productive, and provide caring behaviors in a more compassionate manner (Chana et al., 2015).

Institutions

Decreasing callouts and absenteeism through a stress management education program had positive implications for the institution. Organizationally, the project site may be able to provide psychiatric nurses more opportunities for stress management interventions in the workplace. For example, providing nurses with sufficient time for

walking during lunch breaks can reduce work stress. Effective stress management and higher levels of nurse well-being have been linked with better job engagement, decreased callout/absenteeism, decreased turnover rate, improved collaboration and communication among members of the interdisciplinary treatment teams, and fewer medical errors (Chana et al., 2015; Hall et al., 2016). This project could encourage health care organizations by offering nurses more stress management benefits, such as exercise classes and additional stress reduction programs at work.

Systems

Decreasing callouts and absenteeism through a stress management education program had a number of positive implications for the health care systems as a whole. Assisting psychiatric nurses to manage work stress and decrease callout and absenteeism has the potential to shift the systems' culture to provide for the psychological and professional well-being of the nurses as well as the quality of patient care provided. Increased levels of stress and burnout are being experienced by practicing psychiatric nurses and are well documented in the nursing literature **(**Laschinger & Fida, 2014). Helping psychiatric nurses to manage work stress is significant by allowing nurses to be more productive and less likely to be absent from or quit their jobs.

Positive Social Change

The project was helpful in providing education related to the recognition, avoidance, and management of work-related stress. The pretest and posttest were useful in assessing the nurses' knowledge of work-related stress before and after the educational program. Positive social change serves to improve the social and human condition

(Walden University, 2018). Absenteeism among nurses is one of the factors related to job dissatisfaction and nurse turnover (Mmamma, Mothiba, & Nancy, 2015). This project can affect social change in the psychiatric nursing field. Potential implications for positive social change include helping to ensure that the nursing workforce is healthier and more satisfied with their job. Stress management programs such as this DNP project have been shown to decrease nurses' absenteeism, which affects patient care outcomes and productivity in the healthcare institution.

Project Implementation

Implementation is critical to the success of a project because it is the necessary step that transforms the strategic plans into action in order to achieve the goals. Implementing a project means to carry out activities with the aim of delivering the outputs and monitoring progress compared to the work plan (Powell, Waltz, Chinman, Damschroder, Smith, Matthieu, Proctor, & Kirchner, 2015). During the implementation stage, the project manager coordinates and directs project resources to meet the objectives of the project plan (Li, Jeffs, Barwick, & Stevens, 2018). The main benefits to implementation are the abilities to execute the tasks needed to complete the project, identify the personnel and resources needed, and document the timeline to ensure that the project goals are achieved (Powell et al., 2015). Before implementing the program, I consulted with the nurses at the project site and asked for their input on the content and goal of the program. Consulting with these nurses was very important because input from them was valuable to ensure they understand the theoretical basis of the program being implemented. When nurses know the goals and objectives of the program and how the

goals are to be achieved, they are more likely to buy into the program. Nurses at the project site gained insight about the program's theory and how they could improve their work. That knowledge promoted a greater buy-in and reduced the likelihood of them creating their own modifications to manage the problem.

Secondly, I communicated the details of the program to be implemented. I ensured that nurse supervisors were familiar and comfortable with the program so they could share their knowledge and support the nurses as they become stressed. I asked the nurse supervisors to monitor, for one month, both the number of callout days and work days of all their staff and then share those observations. The reason for this was to recognize nurses who do not call out, provide constructive feedback to nurses who do callout, and emphasize areas for improvement. Furthermore, I established a process for ongoing reflection for staff to share their experiences and receive feedback, including opportunities for support and learning.

Program Evaluation

Evaluation is the final stage of the education process. It is the continuing assessment of the staff's learning progress during and after the program (Parkinson, 2016). The aim of evaluation involves collecting and using information to determine whether the education provided was successful and achieved the desired learning outcomes (Bastable, 2014). Evaluation can take many forms and can help to promote quality in education practice (Hughes & Quinn, 2013). A comparison of the PSS scores obtained through the pre- and posttests was used for evaluating the effectiveness of the educational intervention. Comparing the mean scores of perceived work stress before and

one month after the educational intervention showed a significant reduction in the levels of stress level among the nursing staff. On the paired sample statistics, the Pre-stress score before the intervention was 33.57 and the after intervention Post-stress score was 17.80. In addition, the mean number of callouts before the intervention was 3.87 and 0.84 afterwards, indicating a significant decrease in the number of call outs after the intervention. The findings of the project indicated that the stress levels of the nursing staff were reduced through the implementation of the stress management program. Hence, the stress management program was effective in reducing work-related stress in practicing psychiatric nurses because the numbers of callouts decreased and the nurses felt less stressed as evidenced by the results of the post-test scores.

Recommendations

Nurses are susceptible to work stress because of the extremes in their daily activities. The gap in practice that this DNP project sought to address was the lack of resources provided to psychiatric nurses concerning interventions to decrease stress and improve their well-being. Recommendations that would greatly aid in addressing this gap in practice would be to reduce work stress among nurses by employing strategies such as assertiveness training, establishment of fun in the work environment, shared governance, and self-scheduling. The first recommendation is to encourage nurses to actively participate in organizational committees and groups in connection with the nursing leadership council. Secondly, change should be promoted as constructive and nurses should be engaged in the change process to promote and reward positive changes in behavior and practices. Providing the educational content in a variety of different formats

is of the utmost importance. Participants in the project gave the impression that it was essential that the educational information be provided to all psychiatric nurses including the new employees' orientation classes. Another recommendation is the establishment of a monthly stress management program as an on-going initiative for nurses to equip them with effective strategies. The establishment of a monthly program would include and support the nurses in strengthening and sustaining stress reduction practices such as meditation, yoga, and exercises as these have been proven to help reduce stress both within and beyond the workplace (Shapiro, Wang, Peltason, 2015; Yang, Tang, & Zhou, 2018). Additionally, in using good stress management skills nurses can boost their morale, which motivates and keeps them focused on their job and performance (Wright, 2014).

Participants' feedback raised the idea that stress management practices should be offered daily in the workplace to create opportunities for social interactions and encourage open communication and participation in decision making that affects their various roles. Furthermore, new learning experiences among nurses should be promoted. The organization should create family-friendly policies to encourage work-life balance and provide training for workplace stress management such as an employee assistance program, offered by the Human Resources department, to help employees find professional help with work and/or personal issues (Richmond et al., 2017). On the whole, participants were very interested in having stress management programs such as on-site and off-the-job exercise groups, relaxation techniques such as yoga, and meditation groups that can help them manage their stress (Alberts, & Hülsheger, 2015;

Byron et al., 2015). Participants strongly agreed that the education program was significant in assisting them in handling their stress better, both at work and in their personal lives.

Contribution of the Doctoral Project Team

The DNP project team, comprised of members of the nursing leadership council, met with me before and after the implementation of the project. Team members were very receptive to assisting with the project and carrying out their individual responsibilities to make the project successful. Before the project was initiated, team members were given a general idea of the project and the evidence supporting it. Team members gave input on the course objectives, content, class design, location, time, and directives for completing the surveys. One of the team members served as a participant in the project. Unit manager**s** provided snacks as incentives. Upon completion of the program, team members were urged to appraise the entire program and make recommendations. A team meeting was also planned to talk about the project results and to build upon the final recommendations. Currently preparations are being made to establish an employee assistant program, however, the ergonomically designed workstations and a designated quiet room to relax and recharge are still under consideration with nursing leadership (Foster, Cuzzillo, & Furness, 2018; Hyland, Lee, & Mills, 2015; Richmond et al., 2017).

Strengths and Limitations of the Project

The strengths of the DNP project included the use of the Perceive Stress Scale, which is a validated tool for measuring perceived work-related stress (Sun et al., 2019).

The literature review played a significant role in providing evidence for the benefits of the stress management program and its positive effect on nurses' health and well-being (Foster, Cuzzillo, & Furness, 2018; Hyland et al., 2015; Oates, 2018; Richmond et al., 2017; Sailaxmi, & Lalitha, 2015; Shapiro, Wang, Peltason, 2015; Yang, Tang, & Zhou, 2018). The pretest scores showed a lack of information related to the identification, avoidance, and management of work stress, while the posttest scores showed knowledge gained when compared to the pre-test scores. In addition, the project team and participants were very engaged, and they offered important feedback during project development. Furthermore, the project participants were very devoted to executing the practice activities during the presentation. The hospital fully supported the project and encouraged nurse participation. The nursing leadership provided enough time for participants to complete the surveys in a way that did not interrupt their workflow.

The majority of nurses who participated in the survey were RNCs and DCAs, which is an indication that there are more charge nurses and support staff in the facility where the project improvement initiative was conducted. Having more RNCs and DCAs in the facility might affect the management of stressful activities or experiences since charge nurses are expected to lead staff while managing the work systems and unit processes to ensure that the needs of the patients are met (American Association of Colleges of Nursing (AACN), 2013). Charge nurses are also tasked with ensuring that all procedures run smoothly on the unit so as to provide quality patient care. In addition, charge nurses spend additional time dealing with documentation, paperwork, treatments, education, and communication with team members in order to effectively complete tasks

(AACN, 2013). Charge nurses also ensure that all staff are working together to improve the patients' satisfaction on the unit.

Project limitations represent weaknesses within the project design that may influence the outcomes and conclusions of the project (Wang, Bolland, & Grey, 2015). Limitations are important to understand in order to interpret the validity of the project findings. Project limitations included that more charge nurses volunteered to participate in the educational program than the other nursing classifications, therefore, decreasing the generalizability to the other nursing classification in the organization. More charge nurses may have participated in the program because of their familiarity with me as a charge nurse at the project site. The small number of participants from the other nursing classifications may limit the motivation of upper leadership to expand the program. The project, however, provided the prospect for more research on the importance of stress management programs and its effect on reducing stress, improving health, and decreasing callouts/absenteeism. In addition, collection of data was done only at the beginning and end of the program. The project findings may have been stronger if additional data had been collected 3 months after the program to see if the results had been sustained.

Section 5: Dissemination Plan

Distribution of research and evidence-based project findings is a fundamental constituent to advancing positive change and implementing best practices and innovations (White, Dudley-Brown, & Terhaar, 2016). Dissemination is presenting the research findings to specific audiences and should be outlined in a plan that focuses on the needs of the audience that will use the knowledge (Gagnon, 2011). My plan is to disseminate the project's findings at the nursing team meetings, nursing leadership council meetings, and unit staff meetings. I also plan to encourage involvement in the implementation strategies. The purpose of engaging nurses in the project's implementation is to ensure widespread buy-in and to increase the odds of making an impact on the well-being of nurses (see Edwards, 2015).

I aligned strategies with the organization's stakeholders to increase the odds of sustainability and commitment to success. In addition, I employed collaborative strategies that will be a catalyst for positive change in the hospital. The collective impact framework posits that no single entity can tackle an organization's complex problem effectively (Edwards, 2015). I also identified the drivers of organization health improvement and selected strategies that may institute a practice of stress management that becomes part of the daily workflow. Furthermore, I set goals and objectives for the implementation strategies while considering evaluation of the project that was built into the planning process. I collected the baseline data and compared the before and after implementation data, making sure that the intervention made a difference.

The primary audience for this project was nursing staff at all levels from nurse supervisors to direct care assistants. However, improving well-being through stress management education strategies applies to all health care workers who regularly work with patients and their families. According to Gagnon (2011), presenting the project's findings at professional meetings allows for more rapid dissemination. A variety of approaches to disseminate the project findings were made available. First, a PowerPoint presentation of the project's finding was submitted to the nursing leadership council, and the program materials were distributed as flyers and handouts to the nurses on the unit. Unit managers meet twice a week for team meetings, and they now schedule half-an-hour every team meeting to talk about stress management strategies. The assistant director of nursing also conducts nursing information sharing conference calls three times a week, during which the stress management strategies are discussed. Furthermore, the director of learning resources plans to include the stress management program in the new employee orientation class and plans to hold stress management workshops to address and improve the mental health of the nurses. The chief nursing officer also plans to disseminate the information on the hospital's website and share the information through mass emails to all of the nurses.

Analysis of Self

My role in this doctoral project was threefold: practitioner, scholar, and project manager. The knowledge I acquired by conducting this DNP project has developed my leadership skills, communication skills, and ability to conduct and implement a program (see Ulrich, Lavandero, & Early, 2014). The DNP project allowed me to experience in a

real-life situation many of the concepts that I learned in my doctoral classes**.** I have grown professionally and personally and have gained a better understanding of nursing leadership while improving my ability to respond and address organizational issues (see Porter-O'Grady & Malloch, 2015).

Practitioner

Presently, I work as a charge nurse directing and supervising patient care. As a practitioner, I work with patients, families, groups, and communities assessing their mental health needs. The knowledge gained from this DNP program has prepared me to engage in advanced nursing practice, provide leadership for evidence-based practice, implement evidence-based nursing practices, and lead interprofessional teams in the analysis of complex practice and organizational issues (AACN, 2006). The knowledge gained was in accordance with the DNP Essential VI: Interprofessional collaboration for improving patient and population health outcomes (AACN, 2006). Graduating from the DNP program enhanced my knowledge as a content expert in offering primary care services to the mental health population and also contributes to policy development, quality improvement, and evaluation of the provision of health care services as stipulated by the DNP Essential V: Health care policy for advocacy in health care (AACN, 2006).

Scholar

Conducting this evidence-based project was a form of scholarly activity, and I gained knowledge regarding stress management and its impact on nurses' well-being at a personal and organizational level. As a scholar, I acquired the skills to develop scholarly works that will promote the nursing profession. I also learned how to identify a nursing

practice problem; explore evidence-based literature; and plan, implement, and evaluate an educational program (see AACN, 2006). In addition, I learned new information that has increased my knowledge base and has helped me become a better practitioner. I learned to work with stakeholders and translate knowledge that is meaningful and applicable to nurses in their work environment (see AACN, 2006). Also, I acquired skills in data collection and analysis through working with SPSS to evaluate the data and disseminate the findings to integrate new knowledge (see AACN, 2006).

Project Manager

As a project manager, I supervised all aspects of the project ensuring that the relevant steps were covered according to the Walden University's Manual for Quality Improvement Evaluation Projects (Walden University, 2018). Conducting this project has allowed me to acquire knowledge and skills for advocating and implementing change that will advance the nursing profession. According to Mélanie et al. (2017), change does not occur readily; nonetheless, the stronger the leader, the better the chances that change will take place. I have learned how to recognize a practice problem and seek resources to conduct a project. The skills I have learned through this project will provide me with the leadership and vision to remove roadblocks and motivate, coach, and inspire the team to do their best work (see Porter-O'Grady & Malloch, 2015; Ulrich et al., 2014).

Completing this DNP project has helped me to build a solid network that has fostered many positive relationships within my facility/community. Teaming up with a more experienced mentor helped me grow and learn the skills necessary to keep up with emerging techniques. My long-term professional goal is to merge the roles of a

practitioner, scholar, and project manager with the knowledge gained to become an expert in specialized areas. In completing this DNP program, I have achieved a higher level of clinical expertise that will elevate my leadership and professionalism and lead to more career opportunities (see AACN, 2013).

One of the challenges faced in conducting the DNP project involved participant commitment. Despite the fact that I provided written information about the program at staff meetings, most participants were reluctant to get involved. However, I engaged in informal rounds on all of the units to broaden their knowledge of the benefits of managing work stress and improving patient outcomes. By the end of each shift, most of the nurses engaged in the program. I realized that it is important to recognize the values of nurses, empower their participation, and encourage collaborative relationships (see Ulrich et al., 2014). Critically appraising existing literature and other relevant evidence to design, implement, evaluate and disseminate the project's findings has given me insights that will allow me to recognize relevant issues, develop quality improvement programs, and implement evidence-based practice through interdisciplinary collaboration in the organization to maintain the delivery of ongoing high standards of care (AACN, 2006). In addition, I have gained the skills to contribute and develop initiatives that will advance the nursing profession and improve patient outcomes.

Summary

Work stress is a current and future health and safety issue. Stress can damage employee health and negatively impact the performance and productivity of the organization. It is important to understand its effects on employees and then implement

better solutions. Work stress is a national health crisis that must be tackled for the well-being of all employees.

The purpose of the project was to design, implement, and evaluate an educational program focusing on work stress among psychiatric nurses. The goal of this project was to decrease work stress and absenteeism among practicing psychiatric nurses working in an in-patient mental health hospital. Statistical analyses were used to determine if there were improvements in the participants' perception of stress. Results demonstrated that the program participants realized that they had gained knowledge and confidence and were better able to manage their level of stress. The project achieved its goal to assist psychiatric nurses to manage work stress and decrease the number of callouts per month. The project site had a total number of 253 callouts per month before the educational intervention and 51 callouts after the educational intervention.

Hence, I believe that stress management strategies can be used within the nursing work environment and that it can contribute to self-care. The emerging evidence from this project supports that stress impairs the work of nurses through absenteeism. The DNP project demonstrated that teaching stress management strategies improved the participants perceived levels of work stress**,** enabled them to more effectively manage their stress, and thereby positively impacted their well-being while it decreased absenteeism. Nevertheless, the program will need further development in order to allow more nurses the opportunity to participate and engage in the program. The promotion of a hospital-wide commitment to maintaining a stress-free workforce can lead to a decrease in absenteeism while improving the organization's productivity.

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Appendix A

Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

Name _____Date _____Age _____ Gender (Circle): **M F** Other _____

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

1. In the last month, how often have you been upset because of something that happened unexpectedly at work? **0 1 2 3 4**

2. In the last month, how often have you felt that you were unable to control the important things in your life at work? **0 1 2 3 4**

3. In the last month, how often have you felt nervous and "stressed" at work? **0 1 2 3 4**

4. In the last month, how often have you felt confident about your ability to handle your personal problems at work? **0 1 2 3 4**

5. In the last month, how often have you felt that things were going your way at work? **0 1 2 3 4**

6. In the last month, how often have you found that you could not cope with all the things that you had to do at work? **0 1 2 3 4**

7. In the last month, how often have you been able to control irritations in your life at work? **0 1 2 3 4**

8. In the last month, how often have you felt that you were on top of things at work? …… **0 1 2 3 4**

9. In the last month, how often have you been angered because of things that were outside of your control at work? **0 1 2 3 4**

10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them at work? **0 1 2 3 4**

Appendix B

De-Identified Retrospective Data

Name	Age	Gender	Classification	Date	December Call Out
Nurs 1	26	F	DCA	1/29/20	5
Nurs 2	54	M	DCA	1/29/20	5
Nurs 3	56	F	RNC	1/29/20	5
Nurs 4	52	F	RNS	1/29/20	3
Nurs 5	47	F	RN	1/29/20	4
Nurs 6	52	M	RNC	1/29/20	5
Nurs 7	30	F	RN	1/29/20	5
Nurs 8	61	F	RNC	1/29/20	7
Nurs 9	32	F	RN	1/29/20	5
Nurs 10	59	F	DCA	1/29/20	5
Nurs 11	58	F	RNC	1/29/20	4
Nurs 12	62	F	RNC	1/29/20	3
Nurs 13	55	F	DCA	1/29/20	5
Nurs 14	42	F	DCA	1/30/20	6
Nurs 15	33	F	DCA	1/30/20	5
Nurs 16	52	F	DCA	1/30/20	7
Nurs 17	53	F	RNS	1/30/20	4
Nurs 18	54	F	RNC	1/30/20	4
Nurs 19	34	M	RNC	1/30/20	6
Nurs 20	58	F	LPN	1/30/20	3
Nurs 21	41	F	RNC	1/30/20	7
Nurs 22	32	F	RN	1/30/20	5
Nurs 23	32	F	RNS	1/30/20	5
Nurs 24	46	F	LPN	1/30/20	6
Nurs 25	50	F	DCA	1/30/20	6
Nurs 26	48	F	RN	1/30/20	8
Nurs 27	55	F	RNC	1/30/20	5
Nurs 28	65	F	RNS	1/30/20	8
Nurs 29	46	F	RNC	1/30/20	3
Nurs 30	54	M	LPN	1/30/20	3
Nurs 31	50	F	RNC	1/31/20	4
Nurs 32	51	F	LPN	1/31/20	3
Nurs 33	44	F	RNC	1/31/20	4
Nurs 34	55	F	RNC	1/31/20	4
Nurs 35	58	F	RN	1/31/20	3

Nurs 36	43	F	DCA	1/31/20	2
Nurs 37	40	F	DCA	1/31/20	2
Nurs 38	62	F	RN	1/31/20	3
Nurs 39	49	F	DCA	1/31/20	1
Nurs 40	44	F	RN	1/31/20	3
Nurs 41	70	F	RNC	1/31/20	3
Nurs 42	52	F	RNC	1/31/20	3
Nurs 43	70	F	RNC	1/31/20	7
Nurs 44	45	M	RNC	1/31/20	2
Nurs 45	48	F	RNC	1/31/20	1
Nurs 46	64	F	RNS	1/31/20	5
Nurs 47	55	M	DCA	1/31/20	2
Nurs 48	49	F	RNS	1/31/20	2
Nurs 49	62	M	RNC	1/31/20	2
Nurs 50	64	F	DCA	1/31/20	2
Nurs 51	24	F	DCA	1/31/20	2
Nurs 52	52	M	RNC	1/31/20	2
Nurs 53	42	F	DCA	1/31/20	2
Nurs 54	51	M	DCA	1/31/20	4
Nurs 55	42	F	RN	1/31/20	1
Nurs 56	53	F	RNC	1/31/20	1
Nurs 57	37	F	LPN	1/31/20	2
Nurs 58	62	F	RNS	1/31/20	5
Nurs 59	37	F	DCA	1/31/20	3
Nurs 60	64	F	RNC	1/31/20	3
Nurs 61	61	M	RNC	1/31/20	1

Appendix C

Pretest Scores

Name	Age	Gen	Class	Date	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Nurs 1	26	F	DCA	1/29/20	4	3	3	3	1	4	3	2	4	4
Nurs 2	54	M	DCA	1/29/20	4	2	3	3	1	3	3	1	3	3
Nurs 3	56	F	RNC	1/29/20	4	2	3	4	1	3	3	1	3	3
Nurs 4	52	F	RNS	1/29/20	2	3	3	4	2	4	4	2	3	3
Nurs 5	47	F	RN	1/29/20	4	3	4	4	2	4	4	2	3	3
Nurs 6	52	M	RNC	1/29/20	4	3	4	2	1	3	3	1	3	3
Nurs 7	30	F	RN	1/29/20	3	3	3	3	2	3	3	2	3	3
Nurs 8	61	F	RNC	1/29/20	4	4	4	4	2	3	4	2	3	3
Nurs 9	32	F	RN	1/29/20	4	3	4	3	1	3	3	2	3	4
Nurs 10	59	F	DCA	1/29/20	4	4	4	4	1	3	3	2	2	3
Nurs 11	58	F	RNC	1/29/20	4	3	3	3	1	4	3	2	3	4
Nurs 12	62	F	RNC	1/29/20	4	4	3	4	2	3	3	2	3	4
Nurs 13	55	F	DCA	1/29/20	4	2	3	3	1	3	3	2	3	3
Nurs 14	42	F	DCA	1/30/20	4	3	4	4	1	4	3	2	3	4
Nurs 15	33	F	DCA	1/30/20	4	3	4	2	1	3	3	2	3	4
Nurs 16	52	F	DCA	1/30/20	3	3	4	3	1	3	3	2	3	4
Nurs 17	53	F	RNS	1/30/20	3	3	4	2	1	3	3	2	3	4
Nurs 18	54	F	RNC	1/30/20	3	4	4	4	1	3	3	2	3	3
Nurs 19	34	M	RNC	1/30/20	4	4	4	2	1	3	3	2	3	4
Nurs 20	58	F	LPN	1/30/20	2	4	4	2	2	3	3	2	3	3
Nurs 21	41	F	RNC	1/30/20	4	3	4	3	2	3	3	2	3	3
Nurs 22	32	F	RN	1/30/20	3	3	4	3	2	4	2	2	4	4
Nurs 23	32	F	RNS	1/30/20	3	3	3	3	2	3	3	2	4	3
Nurs 24	46	F	LPN	1/30/20	3	2	3	3	2	3	4	2	3	3
Nurs 25	50	F	DCA	1/30/20	4	2	4	4	1	3	4	2	3	4
Nurs 26	48	F	RN	1/30/20	4	4	3	2	2	3	3	2	3	3
Nurs 27	55	F	RNC	1/30/20	4	3	3	3	1	3	3	2	3	4
Nurs 28	65	F	RNS	1/30/20	2	3	3	3	1	3	3	2	3	3
Nurs 29	46	F	RNC	1/30/20	4	2	3	4	2	3	3	2	3	3
Nurs 30	54	M	LPN	1/30/20	3	2	4	4	1	2	4	2	2	3
Nurs 31	50	F	RNC	1/31/20	4	4	4	3	1	3	3	2	3	3
Nurs 32	51	F	LPN	1/31/20	4	2	4	4	1	3	3	2	3	3
Nurs 33	44	F	RNC	1/31/20	4	3	3	4	1	3	3	2	4	4
Nurs 34	55	F	RNC	1/31/20	3	4	4	2	1	3	3	2	3	4
Nurs 35	58	F	RN	1/31/20	4	3	3	3	1	3	3	2	3	3
Nurs 36	43	F	DCA	1/31/20	3	3	3	3	2	3	3	2	3	3

Nurs 37	40	F	DCA	1/31/20	4	3	3	2	2	3	3	2	3	3
Nurs 38	62	F	RN	1/31/20	4	2	3	2	1	2	3	2	3	4
Nurs 39	49	F	DCA	1/31/20	3	2	3	4	1	3	3	2	2	4
Nurs 40	44	F	RN	1/31/20	3	3	4	2	2	3	3	2	3	3
Nurs 41	70	F	RNC	1/31/20	4	4	3	3	2	3	4	2	3	4
Nurs 42	52	F	RNC	1/31/20	4	3	4	4	1	4	4	2	3	4
Nurs 43	70	F	RNC	1/31/20	3	3	3	3	2	3	3	2	3	4
Nurs 44	45	M	RNC	1/31/20	3	4	3	2	2	3	3	2	3	3
Nurs 45	48	F	RNC	1/31/20	4	3	4	3	2	3	3	3	3	3
Nurs 46	64	F	RNS	1/31/20	3	3	3	2	0	3	3	3	3	3
Nurs 47	55	M	DCA	1/31/20	4	4	3	3	1	3	2	3	3	3
Nurs 48	49	F	RNS	1/31/20	3	4	4	2	2	3	3	3	3	3
Nurs 49	62	M	RNC	1/31/20	4	2	3	4	2	3	3	3	3	3
Nurs 50	64	F	DCA	1/31/20	4	2	3	4	3	2	4	2	3	3
Nurs 51	24	F	DCA	1/31/20	3	3	3	4	3	2	3	3	3	3
Nurs 52	52	M	RNC	1/31/20	3	3	4	3	2	2	4	3	3	3
Nurs 53	42	F	DCA	1/31/20	4	4	4	3	3	2	3	2	3	3
Nurs 54	51	M	DCA	1/31/20	4	3	4	4	2	2	3	3	3	3
Nurs 55	42	F	RN	1/31/20	4	3	3	3	2	3	4	3	3	3
Nurs 56	53	F	RNC	1/31/20	3	3	3	4	2	2	3	2	3	3
Nurs 57	37	F	LPN	1/31/20	3	3	3	4	2	2	4	3	3	3
Nurs 58	62	F	RNS	1/31/20	4	4	3	2	2	3	2	3	2	4
Nurs 59	37	F	DCA	1/31/20	4	4	3	2	2	3	3	3	3	3
Nurs 60	64	F	RNC	1/31/20	3	3	3	3	2	3	3	3	3	3
Nurs 61	61	M	RNC	1/31/20	3	4	4	4	0	4	4	1	3	2

Appendix D

Posttest Scores

Name	Age	Gend	Class	Date	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Nurs 1	26	F	DCA	3/4/20	1	2	1	2	2	1	1	1	1	0
Nurs 2	54	M	DCA	3/4/20	2	1	2	1	0	2	1	2	2	0
Nurs 3	56	F	RNC	3/4/20	1	1	2	2	2	1	2	2	1	1
Nurs 4	52	F	RNS	3/4/20	2	1	2	2	2	1	2	1	2	0
Nurs 5	47	F	RN	3/4/20	2	1	2	2	1	2	2	1	2	2
Nurs 6	52	M	RNC	3/4/20	2	2	2	2	2	1	2	2	2	0
Nurs 7	30	F	RN	3/4/20	2	1	2	2	2	2	2	2	1	1
Nurs 8	61	F	RNC	3/4/20	2	2	2	2	2	3	2	2	2	1
Nurs 9	32	F	RN	3/4/20	2	1	2	2	2	2	2	2	2	1
Nurs 10	59	F	DCA	3/4/20	2	2	3	2	2	1	2	2	1	0
Nurs 11	58	F	RNC	3/4/20	2	2	2	2	2	2	2	2	2	1
Nurs 12	62	F	RNC	3/4/20	2	2	1	3	3	1	3	2	2	0
Nurs 13	55	F	DCA	3/4/20	1	2	2	1	2	1	2	2	0	0
Nurs 14	42	F	DCA	3/4/20	2	1	2	1	1	2	1	2	1	0
Nurs 15	33	F	DCA	3/4/20	2	1	2	1	2	2	2	1	2	1
Nurs 16	52	F	DCA	3/4/20	3	1	3	2	2	2	2	2	2	1
Nurs 17	53	F	RNS	3/4/20	3	1	3	2	1	2	2	2	1	1
Nurs 18	54	F	RNC	3/4/20	3	1	3	2	1	2	2	2	2	1
Nurs 19	34	M	RNC	3/4/20	1	1	2	0	2	2	0	2	2	1
Nurs 20	58	F	LPN	3/5/20	2	2	2	2	0	0	3	3	1	0
Nurs 21	41	F	RNC	3/5/20	2	2	2	3	2	2	3	2	2	0
Nurs 22	32	F	RN	3/5/20	3	2	3	2	2	1	2	2	1	1
Nurs 23	32	F	RNS	3/5/20	3	1	2	3	2	2	2	2	1	0
Nurs 24	46	F	LPN	3/5/20	2	2	2	2	3	2	2	1	2	0
Nurs 25	50	F	DCA	3/5/20	1	0	2	2	2	0	1	2	1	2
Nurs 26	48	F	RN	3/5/20	3	3	3	0	0	3	0	0	4	2
Nurs 27	55	F	RNC	3/5/20	1	1	2	2	2	2	2	2	3	1
Nurs 28	65	F	RNS	3/5/20	2	1	2	1	2	3	3	1	3	1
Nurs 29	46	F	RNC	3/5/20	1	0	2	3	3	0	2	2	2	1
Nurs 30	54	M	LPN	3/5/20	0	0	1	3	3	2	3	3	0	0
Nurs 31	50	F	RNC	3/5/20	2	0	0	3	2	2	3	3	0	0
Nurs 32	51	F	LPN	3/5/20	2	0	2	3	2	1	2	2	2	0
Nurs 33	44	F	RNC	3/5/20	2	1	3	2	2	2	3	2	3	1
Nurs 34	55	F	RNC	3/5/20	3	2	2	2	1	3	3	1	3	1
Nurs 35	58	F	RN	3/5/20	2	1	2	3	2	2	2	1	2	2
Nurs 36	43	F	DCA	3/5/20	3	2	1	3	3	0	3	3	2	0

Nurs 37	40	F	DCA	3/5/20	1	1	2	2	2	2	2	2	3	1
Nurs 38	62	F	RN	3/5/20	2	1	2	2	1	3	2	1	3	2
Nurs 39	49	F	DCA	3/5/20	1	0	1	3	2	0	3	3	1	0
Nurs 40	44	F	RN	3/6/20	2	2	2	2	2	3	2	2	2	2
Nurs 41	70	F	RNC	3/6/20	1	3	2	2	2	2	3	3	1	2
Nurs 42	52	F	RNC	3/6/20	2	1	2	3	3	1	3	2	2	2
Nurs 43	70	F	RNC	3/6/20	3	1	2	3	2	2	2	3	2	2
Nurs 44	45	M	RNC	3/6/20	3	2	3	2	2	2	2	2	2	2
Nurs 45	48	F	RNC	3/6/20	3	3	3	3	2	2	3	2	2	2
Nurs 46	64	F	RNS	3/6/20	1	2	3	2	3	1	2	3	1	1
Nurs 47	55	M	DCA	3/6/20	1	1	2	2	1	2	2	3	3	2
Nurs 48	49	F	RNS	3/6/20	3	3	3	2	0	1	2	2	1	2
Nurs 49	62	M	RNC	3/6/20	2	0	2	3	2	0	1	3	1	1
Nurs 50	64	F	DCA	3/6/20	3	0	2	3	2	0	3	3	2	1
Nurs 51	24	F	DCA	3/6/20	3	0	0	3	3	0	3	3	0	0
Nurs 52	52	M	RNC	3/6/20	3	1	2	2	2	0	2	3	0	1
Nurs 53	42	F	DCA	3/6/20	2	1	1	1	3	1	3	3	1	0
Nurs 54	51	M	DCA	3/6/20	2	0	2	2	2	1	2	2	3	2
Nurs 55	42	F	RN	3/6/20	2	1	2	3	3	2	3	3	2	1
Nurs 56	53	F	RNC	3/6/20	0	1	1	3	3	1	3	3	1	2
Nurs 57	37	F	LPN	3/6/20	2	2	2	2	2	0	2	3	3	2
Nurs 58	62	F	RNS	3/6/20	3	3	3	0	0	3	0	0	3	2
Nurs 59	37	F	DCA	3/6/20	3	2	0	0	3	1	3	3	3	0
Nurs 60	64	F	RNC	3/6/20	2	1	2	2	3	2	3	2	1	0
Nurs 61	61	M	RNC	3/6/20	3	3	3	3	2	0	3	3	2	0

Appendix E

De-Identified Prospective Data

Name	Age	Gender	Class	Date	February Call Out
Nurs 1	26	F	DCA	3/4/20	0
Nurs 2	54	M	DCA	3/4/20	1
Nurs 3	56	F	RNC	3/4/20	2
Nurs 4	52	F	RNS	3/4/20	0
Nurs 5	47	F	RN	3/4/20	0
Nurs 6	52	M	RNC	3/4/20	1
Nurs 7	30	F	RN	3/4/20	0
Nurs 8	61	F	RNC	3/4/20	2
Nurs 9	32	F	RN	3/4/20	1
Nurs 10	59	F	DCA	3/4/20	2
Nurs 11	58	F	RNC	3/4/20	2
Nurs 12	62	F	RNC	3/4/20	0
Nurs 13	55	F	DCA	3/4/20	1
Nurs 14	42	F	DCA	3/4/20	1
Nurs 15	33	F	DCA	3/4/20	0
Nurs 16	52	F	DCA	3/4/20	3
Nurs 17	53	F	RNS	3/4/20	0
Nurs 18	54	F	RNC	3/4/20	0
Nurs 19	34	M	RNC	3/4/20	1
Nurs 20	58	F	LPN	3/5/20	0
Nurs 21	41	F	RNC	3/5/20	3
Nurs 22	32	F	RN	3/5/20	0
Nurs 23	32	F	RNS	3/5/20	0
Nurs 24	46	F	LPN	3/5/20	0
Nurs 25	50	F	DCA	3/5/20	2
Nurs 26	48	F	RN	3/5/20	3
Nurs 27	55	F	RNC	3/5/20	2
Nurs 28	65	F	RNS	3/5/20	3
Nurs 29	46	F	RNC	3/5/20	0
Nurs 30	54	M	LPN	3/5/20	0
Nurs 31	50	F	RNC	3/5/20	2
Nurs 32	51	F	LPN	3/5/20	0
Nurs 33	44	F	RNC	3/5/20	1
Nurs 34	55	F	RNC	3/5/20	1
Nurs 35	58	F	RN	3/5/20	0

Nurs 36	43	F	DCA	3/5/20	0
Nurs 37	40	F	DCA	3/5/20	0
Nurs 38	62	F	RN	3/5/20	1
Nurs 39	49	F	DCA	3/5/20	0
Nurs 40	44	F	RN	3/6/20	1
Nurs 41	70	F	RNC	3/6/20	1
Nurs 42	52	F	RNC	3/6/20	1
Nurs 43	70	F	RNC	3/6/20	3
Nurs 44	45	M	RNC	3/6/20	0
Nurs 45	48	F	RNC	3/6/20	0
Nurs 46	64	F	RNS	3/6/20	2
Nurs 47	55	M	DCA	3/6/20	1
Nurs 48	49	F	RNS	3/6/20	0
Nurs 49	62	M	RNC	3/6/20	0
Nurs 50	64	F	DCA	3/6/20	0
Nurs 51	24	F	DCA	3/6/20	0
Nurs 52	52	M	RNC	3/6/20	0
Nurs 53	42	F	DCA	3/6/20	1
Nurs 54	51	M	DCA	3/6/20	2
Nurs 55	42	F	RN	3/6/20	0
Nurs 56	53	F	RNC	3/6/20	0
Nurs 57	37	F	LPN	3/6/20	0
Nurs 58	62	F	RNS	3/6/20	2
Nurs 59	37	F	DCA	3/6/20	1
Nurs 60	64	F	RNC	3/6/20	1
Nurs 61	61	M	RNC	3/6/20	0

Appendix F

Stress Management Techniques

Stress Management Techniques that work well and fast: **Effective stress management techniques can offset the negative effects of stress in your life. Try these proven, fast, and reliable stress remedies.**

Diaphragmatic Breathing (abdominal breathing or deep breathing)
Diaphragmatic Breathing is one of the simplest yet most important stress management techniques you can master. To practice Diaphragmatic Breathing: Sit comfortably or lie down and place one hand on your chest and the other hand on your stomach. Slowly exhale through your mouth and then slowly inhale through your nose, concentrating on keeping your chest still while expanding your stomach. You should notice a fall and rise of your stomach, and not your chest, if done properly. Do this breathing exercise 20-30 minutes per day to reduce stress and anxiety.

Meditation: Meditation is unquestionably one of the best and most popular stress management techniques. Meditation helps you quiet your mind and keeps you focused on the present, so you spend less time worrying about the future and thinking about the past. You can listen to guided meditations or audio files that incorporate inspirational entrainment. Practice meditation for 20 minutes twice daily while sitting with eyes closed and repeating a mantra. These approaches will help induce a relaxed state very quickly.

Mindfulness Meditation: Mindfulness meditation is known to stands out for stress relief. It is a proven way to calm the mind. To practice Mindfulness meditation: Sit quietly with your eyes closed and breathe normally while saying to yourself “breathing in, breathing out.” This can help keep other thoughts at bay.

Appendix G

Stress Management Tips

1. Count to 10 before you speak or react.
2. Take a few slow, deep breaths until you feel your body unclench a bit.
3. Go for a walk, even if it's just to the restroom and back. It can help break the tension and give you a chance to think things through.
4. Try a quick meditation or prayer to get some perspective.
5. If it's not urgent, sleep on it and respond tomorrow. This works especially well for stressful emails and social media trolls.
6. Walk away from the situation for a while, and handle it later once things have calmed down.
7. Break down big problems into smaller parts. Take one step at a time instead of trying to tackle everything at once.
8. Chill out with music or an inspiration podcast to help you rage less on the road.
9. Take a break to pet a dog, hug a loved one or help someone out.
10. Work out or do something active. Exercise is one of the best antidotes for stress.