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Occupational Stress in Psychiatric Nurses and the Impact of Self-Care Activities

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ABSTRACT

OCCUPATIONAL STRESS IN PSYCHIATRIC NURSES AND THE IMPACT OF SELF-CARE ACTIVITIES

by

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ABSTRACT OF GRADUATE STUDENT PROJECT

Dissertation

Andrews University

College of Health & Human Services

TITLE: OCCUPATIONAL STRESS IN PSYCHIATRIC NURSES AND THE IMPACT OF SELF-CARE ACTIVITIES

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Background

The nursing profession is an extremely stressful occupation. Psychiatric nurses face many of the general stressors that are inherent within the profession as well as unique challenges in taking care of psychiatric patients. Prolonged exposure to stress can impact the quality of the nurses' lives as well as the quality of patient care. Engagement in self- care activities can promote the well-being of psychiatric nurses.

Purpose

To investigate the level of occupational stress in psychiatric nurses and offer them a guided six-week program on self-care activities. This intervention was measured for any change in the level of occupational stress that might have occurred.

Method

A mixed-methods approach was used where participants were able to express their stress levels in a numerical form via the Perceived Stress Scale (PSS) and document self- care activities in numerical and textual form via the Occupational Stress in Psychiatric Nurses and the Impact of Self-Care questionnaire (OSPN INC). The sample was obtained through the snowball sampling method.

Results

The instruments used were valid and reliable. The chi-square test showed significant movements within the stress categories from medium to low stress. With the paired sample t-test, although the null hypothesis was retained for the overall instrument, two items of the PSS were significant with positive correlation coefficients above 0.7. The modal responses for the OSPN INC showed participants experienced ongoing reductions in stress levels across the six weeks.

Conclusion

The sample size was small, but data suggested that self-care activities were beneficial in reducing occupational stress levels for psychiatric nurses. Similar investigations could be undertaken with larger sample sizes to enable generalization of the outcomes to wider groups of psychiatric nurses and the nursing profession in general.

Andrews University

College of Health & Human Services

OCCUPATIONAL STRESS IN PSYCHIATRIC NURSES AND THE IMPACT OF SELF-CARE ACTIVITIES

A Scholarly Project

Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Nursing Practice

by

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APPROVAL BY THE COMMITTEE:

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Member: Andrea Baldwin	Member: Gretchen Johnson

September 8, 2022
Date Approved

DEDICATION

I would like to dedicate this project to my family, which includes my daughter Avia and my husband Paul, for believing in me and for constantly being there for me. To my loving friend, Dr. Andrea Baldwin, who has been a limitless source of tremendous help, strength, and support. To my pet and loyal friend, Xyna, who has provided the therapeutic support that I needed many times throughout the writing of this project. Finally, to God, who has been my Rock and my Fortress

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LIST OF ABBREVIATIONS

AACN	American Association of Colleges of Nursing
ANA	American Nurses Association
APNA	American Psychiatric Nurses Association
CDC	Centers for Disease Control and Prevention
COVID-19	Coronavirus Disease 2019
DNP Essentials	Essentials of Doctoral Education for Advanced Nursing Practice
IHI	Institute for Healthcare Improvement
IRB	Institutional Review Board
KFF	Kaiser Family Foundation
MFI	Model for Improvement
MHA	Mental Health America
NCCIH	National Center for Comprehensive and Integrative Health
NSSRN	National Sample Survey of Registered Nurses
OSPN INC	Occupational Stress in Psychiatric Nurses and the Impact of Self-Care questionnaire
PDSA	Plan-Do-Study-Act
PICOT	Population, Intervention, Comparison, Outcome, and Time
PSS	Perceived Stress Scale
SCDNT	Self-Care Deficit Nursing Theory
WHO	World Health Organization

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I want to thank my chair, Dr. Carol Rossman, for dedicating her time to helping me achieve my dreams. Thank-you, Dr. Rossman, for guiding me toward the light of a long dark tunnel and for helping me to complete the project. I really appreciate your hard work and dedication. I want to thank Dr. Gretchen Johnson for the expert guidance she provided on the project in the area of psychiatry and for assisting me in recruiting the subjects. Dr. Johnson, you have played a tremendous role in helping to make my project possible. Thank you so much. Thank you, Laura Carroll, for your tremendous contribution in the area of technology. I really appreciate your dedication and willingness to assist me. Dr. Hinsdale Bernard, your assistance with the project is very much appreciated because your expertise in statistics has helped in upholding the standard of this project. A big thank you to Dr. Andrea Baldwin for her tremendous role as my mentor and methodologist. Dr. Baldwin, you have contributed significantly to this project by developing the OSPN INC instrument, which demonstrated success in capturing the detailed data requirement for the project. In addition, you have been a great source of encouragement, support, guidance, and inspiration. Thank you very much. I want to thank the participants who took the time to participate in this study because the study would not have been possible without them. Finally, I want to thank the School of Nursing at Andrews University for its commitment to helping me achieve my educational career goal.

CHAPTER 1

INTRODUCTION

The American Institute of Stress (2019a) stated that job stress is the major source of stress for the American people. According to the institute, work-related stress creates a major economic burden for the country as it is associated with low productivity, accidents, absenteeism, and high medical cost resulting from sickness. The economic burden of occupational stress in the US is estimated to be greater than $300 billion annually (UMass Lowell, 2019). The Centers for Disease Control and Prevention (CDC, 2020) cited work-related stress as a leading cause of health problems in the workplace and a major occupational health risk, ranking it higher than obesity and physical inactivity. The CDC stated that effective health promotion programs must be established to reduce health risks and improve the quality of life for workers in the US (2020).

The world has also witnessed a change in the mental health status of people since the outbreak of a novel coronavirus (COVID-19) in 2020. COVID-19, which originated in Wuhan, China, in 2019, was declared a pandemic by the World Health Organization (WHO) in March 2020 due to its rapid global spread. Since its emergence, the virus has been a major source of worldwide morbidity, as well as mortality, and has created psychological, and social problems. COVID-19 has been shown to pose a great challenge to the mental health and well-being of healthcare workers, especially nurses who are combatting the disease at the forefront, adding further to their occupational stress, and

giving rise to an increased need for measures to ameliorate job-related stressors (Ali et al., 2021; Mental Health America [MHA], 2021; Sampaio et al., 2021).

Background and Significance of Project

WHO (2020), in defining work-related stress, stated that it is how people may respond when they are presented with work demands and pressure that do not match their knowledge and abilities. This, in turn, creates a challenge to the workers' coping skills. WHO describes a healthy work environment as one that has health-promoting conditions instead of only the absence of harmful conditions. The definition from WHO for health is broader than the absence of disease or infirmity in a person. The organization sees health as encompassing the wellness of the mind, body, and spirit. All these components must be in a positive state for a person to be considered healthy, according to the organization.

Numerous studies identify that nursing is a notoriously high-stress occupation, which is considered a worldwide problem (Guo et al., 2018; Karimi et al., 2018; Zaki & Barakat, 2018). The profession is physically and mentally demanding, with a high incidence of burnout (Ali et al., 2021; Redfearn et al., 2020; Sarafis et al., 2016; Van Bogaert et al., 2017). The sources of common workplace stressors for nurses include poor working relationships, high workload, understaffing, inadequate training, time pressure, emergency cases, lack of support, and frequent demanding communication and relationships with patients and family members. The recent pandemic has also added to the sources of occupational stress for nurses (Karimi et al., 2018; MHA, 2021; Zaki & Barakat, 2018).

It is also important to note that work-related stress is a result of the interaction of worker characteristics and working conditions. This means that the individual's

characteristics in terms of that person's personality and coping abilities play an important role in determining if that individual will experience occupational stress. In other words, one individual may view the job-specific working condition as stressful, while another individual may not have such a view (CDC, 2014; Lawal & Idemudia, 2017). Lazarus and Folkman's transactional theory on stress and coping supports the view that personality variables influence the individual's preconception of stress and cognitive processes for coping with stress. This theory contends that a person's evaluation of a situation and coping mechanism determines the extent to which one finds a situation stressful (Lazarus and Folkman, 1984; McCarthy et al., 2019). Although one cannot ignore the role that individual differences play in occupational stress and coping, one also cannot ignore the fact that evidence-based findings have suggested that certain working conditions can create stress for most workers (CDC, 2014; Babanataj et al., 2019).

Nurses also practice in multiple areas of the healthcare system and, as such, are exposed to challenges unique to their practice environments. One such environment is the mental health department. Psychiatric nurses are responsible for the care of patients with mental illness. These nurses share many of the stressors experienced by other nurses within the profession. In addition, they are faced with unique challenges that result from caring for patients with complex and challenging needs due to an array of psychiatric illnesses (Dehvan et al., 2018; López-López et al., 2019; Mukaihata et al., 2021). (Dehvan et al., 2018; López-López et al., 2019; Mukaihata et al., 2021). Psychiatric nurses often must confront intense interpersonal interactions, dynamic changes in patients, emotional lability, psychological distress, unpredictable behaviors, violence, and aggression from their patient population. Having to deal with these issues can be very

stressful and challenging for psychiatric nurses (Zaki & Barakat, 2018; Zaki, 2016; Edward et al., 2017). Eventually, this prolonged exposure to stress can impact the health and well-being of psychiatric nurses, leading to depression, anxiety, poor physical and mental health, absenteeism, high turnover rates, poor client care, and burnout **(**Fahy & Moran, 2018; Itzhaki et al., 2018; Khamisa et al., 2016).

In addition, there is a projected nursing shortage in the US between 2016 and 2030 (American Association of Colleges of Nursing [AACN], 2019), and new graduates are unlikely to choose mental health nursing as a career. This is not only due to the stigma and fear associated with mental illness but also because some nursing students do not consider psychiatric nursing as "real nursing" (Hunter et al., 2015; Ong et al., 2017). Mental health disorder is also increasing in the US, and the recent pandemic has become an added force in driving the rate of mental illness (Kaiser Family Foundation, 2021; National Institute of Mental Health [NIMH], 2018). There is, therefore, a definite need to preserve the well-being of psychiatric nurses and prolong their collective years of service through adequate stress reduction interventions. On a larger scale, the deleterious effects of stress can lead to an increase in healthcare costs, thus presenting an economic burden for the country (American Institute of Stress, 2019b).

Evidence-Based Interventions for Stress Reduction

Interventions aimed at ameliorating or mitigating stress among psychiatric nurses are beneficial for both nurses and the patient population they serve (Bernburg et al., 2019; Ross et al., 2017). Cheng et al. (2015) stated that stress management programs within the workplace could be divided into three levels:

Person-centered: The focus of stress management interventions at this level is directed toward the person, not at changing the work environment. For example, the worker can be engaged in diaphragmatic breathing as a stress reduction technique.

Person-work interface: At this level, measures are taken to improve both the worker and the work environment, creating increased compatibility between the two. For example, allowing the worker more autonomy in decision-making and fostering a positive environment that seeks to promote the continued growth and improvement of the worker.

Organizational: The goal at this level is to address issues within the work environment, for example, creating opportunities for worker recognition and team goal achievement and ensuring the safety of the work environment.

This project focused on the person-centered approach to stress management. Self-care activities are meaningful interventions nurses can undertake that can help in the management of occupational stress (Blum, 2014). Ross and colleagues (2017) supported a statement in the American Nurses Association (ANA) 2014 online journal, attesting to the lack of self-care among nurses. Nurses are said to be caregivers to others, but they do not find the time to take care of themselves (Ross et al., 2017). Due to the selfless nature of the profession, nurses tend to place the health, safety, and wellness of the population they serve above themselves. Meanwhile, nurses are more likely to have higher stress levels in comparison to the average American (ANA, 2021b; Stone, 2021). Self-care practices for nurses are more important than ever today as more data point to the pandemic's toll on nurses' mental health (ANA, 2021a).

The Healthy Nurse, Healthy Nation social movement by the ANA emphasizes the need for urgent measures to improve the health and wellness of nurses, particularly in such areas as physical activity, quality of life, nutrition, rest, and safety, and thus the subsequent improvement of the nation's health (ANA, 2021b; Stone, 2021). This initiative underscores the importance of the crucial role nurses play in the health of the nation since any improvement in their health and wellness can lead to the improvement of the nation's health and wellness. Healthy nurses are excellent role models for their patients, colleagues, families, communities, and the larger society (ANA, 2021b). The initiative further underscores the importance of self-care practices to improve the health and wellness of nurses.

Self-care is any intentional activities that people engage in to provide for their physical, mental, and spiritual needs. The practice is important for every worker, but it is especially important for nurses who devote their long working hours to the care of others (Purdue Global University, 2021; Mills et al., 2018; Chipu & Downing, 2020). Self-care not only help in stress reduction for nurses, but the activities can also help to replenish the nurse's capacity to provide compassionate and empathic care, and lead to improvement in patients' outcomes (Purdue Global University, 2021; Hofmeyr et al., 2020). Evidence-based information from multiple trials has provided support that self-care interventions that are focused on changes in lifestyle can improve clinical outcomes and quality of life for patients with coronary heart disease, stroke, and hypertension (Riegel, et al., 2017; Fletcher et al., 2015; Parke et al., 2015; Santiago de Araújo Pio et al., 2019). There is also substantial support showing that self-care practice is beneficial in reducing negative outcomes such as burnout for mental health professionals (Posluns &

Gall, 2020; Butler et al, 2017; Santana & Fouad, 2017). A study done with 871 medical students in the United States found that medical students who practiced self-care reported less stress and higher quality of life. The conclusion is that self-care practices may act as protective factors on the negative relationship between stress and quality of life for these students (Ayala et al., 2018).

Self-care for nurses must begin with the realization that there are personal needs and then seeking ways how to fulfill those personal needs (University of Texas Arlington, 2020). The self-care activities in this project were intended to provide the nurses with adaptive coping measures to address modifiable stressors. The activities were considered to be health-promoting behaviors that could satisfy the nurses' personal needs and the subsequent larger societal needs (ANA, 2021b; Ayala et al., 2018).

Problem Statement

Occupational stress among psychiatric nurses is a formidable and constant challenge. Prolonged stress can negatively impact the health and well-being of the nurses and compromise the quality-of-care provisions **(**Zaki & Barakat, 2018; Hasan et al., 2018; Vasconcelos et al., 2016; Itzhaki, et al., 2018).

Purpose of the Project

The purpose of the project was to investigate the effects of occupational stress in psychiatric nurses and to measure the impact of self-care activities through engaging them in a guided intentional six-week program on self-care activities. The project measured occupational stress in a set of psychiatric nurses and the impact of self-care activities on reducing their levels of stress by using two scales. The Perceived Stress

Scale (PSS) (Appendix A) measured the change between pre-intervention and post-intervention stress levels among the psychiatric nurses (see Appendix B for permission). A quality improvement intervention of self-care activities was completed by the psychiatric nurses between these tests. The results of this intervention were recorded using a questionnaire with a daily log known as the Occupational Stress in Psychiatric Nurses and the Impact of Self-Care questionnaire (OSPN INC) (Appendix C).

Given the findings of this study, the model can be recommended with the suggestion to replicate it with a larger sample of psychiatric nurses with similar stress characteristics to increase the generalizability of the results. The significance of this model was that as nurses become less stressed, their health and well-being would improve, and their patient-care delivery would be positively affected.

Population, Intervention, Comparison, Outcome, and Time Question

The guiding PICOT question was: In psychiatric nurses who are experiencing occupational stress, how effective can the implementation of self-care activities be in reducing stress levels after six weeks of the intervention?

Summary

Workplace stress is a common worldwide problem in the nursing profession. Psychiatric nurses face some of the stressors of general nursing, but they also face additional stressors associated with working with psychiatric patients. Psychiatric nurses must be able to meet the therapeutic demands of their patients. Given the far-reaching consequences of occupational stress and interacting variables such as the growing mentally ill population, predicted nursing shortage, and the inability to attract new

graduates to mental health nursing, it is imperative that psychiatric nurses be encouraged to engage in self-care activities as a means of coping with occupational stress.

CHAPTER 2

THEORETICAL FRAMEWORK, CONCEPT IDENTIFICATION, AND REVIEW OF LITERATURE

This evidence-based quality improvement project was designed to offer a guided intentional intervention on self-care activities among selected psychiatric nurses. Nurses are subjected to a high degree of occupational stress due to the nature of the profession. Stress can impact the health and well-being of psychiatric nurses and reduce the quality of care they can offer to patients (Dehvan et al., 2018; Hasan et al., 2018; Keykaleh et al., 2018). There is a great need for nurses to adopt measures aimed at stress reduction. Self-care activities have been identified as measures that can minimize stress and burnout (Richards et al., 2014; Ross et al., 2017). In this chapter, the theoretical framework was described, a literature review was conducted to examine previous knowledge on occupational stress in psychiatric nurses and the impact of self-care activities as coping measures, and the conceptual definitions were discussed.

Theoretical Framework

The theoretical framework informed the project design. Two theories were used to undergird this project. They were Orem's Self-Care Deficit Nursing Theory (SCDNT) and The Model for Improvement (MFI). These provided the scientific and logical frameworks for the development of the study design. The SCDNT provided a frame of reference for the interactions between psychiatric nurses and occupational stress that

placed them at risk for self-care deficit and provided a deeper understanding of the importance of self-care in the promotion and maintenance of health.

Orem's Self-Care Deficit Nursing Theory

The SCDNT consists of three interrelated parts. These are self-care, self-care deficits, and nursing systems. Orem defines self-care as the care or activities that an individual is required and able to perform for themselves upon reaching a state of maturity to maintain life, health, and well-being (Orem, 1995). The self-care in the SCDNT also contains self-care agency, which is the ability of the individual to engage in self-care and is affected by conditioning factors such as age, gender, life experience, developmental ability, and environmental factors, among others. Self-care is necessitated by self-care requisites based on three assumptions: universal, developmental, and health deviation. Self-care deficit occurs when self-care demands exceed self-care agency. This means that the individual does not have the ability to meet his or her self-care demands. The nursing theory aspect includes the self-care deficit stage because nursing is needed to meet the therapeutic self-care requirements of the individual during this time (Orem, 1995; Hasanpour-Dehkordi et al., 2016; Orem et al., 2001; Zaccagnini & White, 2021; Miranda do Vale et al., 2019).

The project manager believed that the SCDNT provided a philosophical understanding of how psychiatric nurses can have self-care deficits and become recipients of nursing care. Nurses are alert to meet the self-care deficits of patients in the activation of the nursing system part of the theory, but they are not always alert to their own self-care needs. The numerous on-the-job demands of nursing care and the other variables within the health care environment which create stress for nurses are sources of

self-care deficit for them. In other words, work-related stress for the nurses can cause self-care agency to become less than self-care demands. The outcome is a resultant inability of the nurses to meet their self-care needs. This lack of requisite capabilities will result in a self-care deficit. When this happens, the caregiver can become the one which now receives care. Figure 1 provides a graphical presentation of the interrelated parts of Orem's SCDNT.

Figure 1

Oren's Self-Care Deficit Nursing Theory

Psychiatric nurses will adopt positive health behaviors through making purposeful decisions to engage in self-care activities. --- Self-care activities can enhance self-care agency.	Lack of self-care can lead to self-care deficit. --- Occupational stressors can become sources of self-care deficit. --- Self-care deficit can prevent self-care.	Nursing systems can become activated if psychiatric nurses have a deficit in self-care. --- The caregivers now become the ones being cared for.

Note: Adapted from Orem (1995

The SCDNT provided the framework for the project intervention as it strongly emphasizes self-care, which is necessary in the sustenance of an individual's health, growth, and development (Orem, 1995). The theory provided an understanding of the need for caregivers to take care of themselves. The SCDNT also supports the definition given by the WHO, which recognizes the need for a healthy balance among the tripartite components of the individual's makeup/constitution, which are the physical, mental, and social (George, 2011). Orem believed that the physical, psychological, interpersonal, and social aspects of health are all interrelated and, therefore, cannot be viewed separately from the individual (George, 2011). This recognition of the individual's wholeness in relation to health is equivalent to the tripartite nature of the individual, which encompasses body, mind, and spirit (Sanctuary Sedona, 2018; White, 1905).

A modified version of a PowerPoint developed by Johnson (2016) was utilized in this project. The presentation illustrated the relationship between body, mind, and spirit, advocating for self-care. Johnson acknowledged the holistic nature of the individual; her intervention was informed by the guidelines developed for self-care by the American Nurses Association (Richards et al., 2014). These self-care activities were aimed at controlling risk factors and increasing coping skills, making the intervention a fitting measure to adopt to help enhance the psychiatric nurses' self-care agency or requisite action to meet their self-care demands. Orem's conceptual framework provided a philosophical lens for psychiatric nurses to understand the importance of self-care to minimize health issues and improve or maintain quality of life. By focusing on their self-care needs, they would increase their self-care agency. The SCDNT could influence

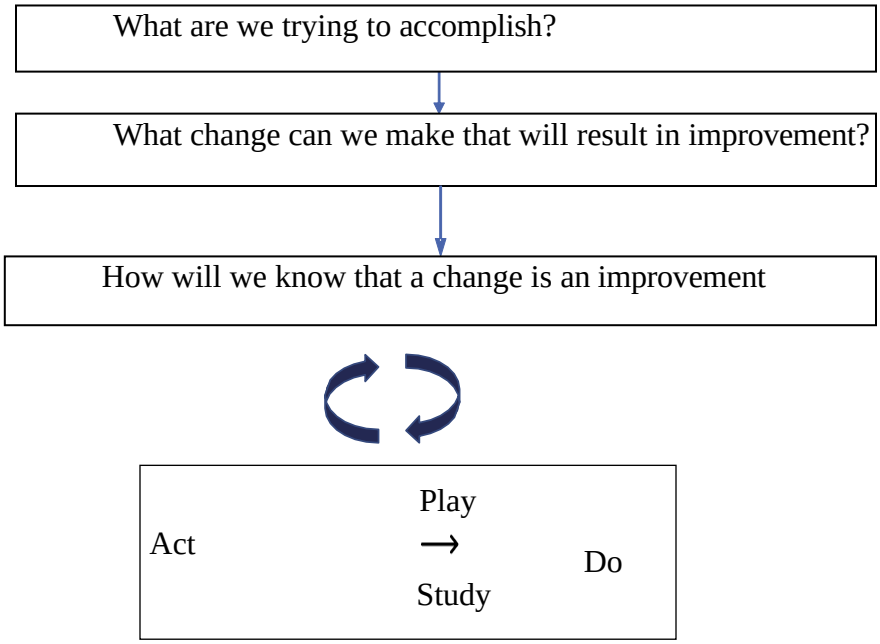
change in practice outcomes by providing a blueprint, allowing nurses to see the importance of being proactive to protect their self-care abilities.

The Model for Improvement

Figure 2 demonstrates the components of the model.

Figure 2

Model for Improvement



Note: Adapted from (IHI, 2020)

Three key questions are specified in the first part of the model and do not have to appear in any specific order. They address (a) an aim that must be measurable and time-specific, (b) measures to be used to indicate if a change occurs, and (c) and ideas for change that can be tested (IHI, 2020). The four stages of the PDSA cycle bear similarity to the scientific method of this project. A purpose statement, hypothesis, methodology, and protocols, among other areas were formulated in the Plan stage. The Do stage is the implementation section to test the hypothesis. In the Study stage, the result was analyzed and interpreted; and the final stage, the Act stage, recommendations were made about the results/outcomes. The MFI framework consists of specific components that were useful in guiding this project

The measurable aim of this project was to reduce occupational stress levels in psychiatric nurses with a resultant improvement in their psychological and physiological health and well-being over six weeks. Change was measured with the Perceived Stress Scale (PSS) (Cohen et al., 1988). To determine change and improvement, a sample of psychiatric nurses who exhibited stress were engaged in intentional self-care activities for four days each week over a six-week period. These nurses were asked to intentionally do activities covering the spiritual, mental, and physical domains. Each time an activity was finished, the participant completed the results on a log denoted as the Occupational Stress in Psychiatric Nurses and the Impact of Self-Care questionnaire to record the impact of that activity. Stress levels were measured before and after the six-week intervention with the use of the PSS via a paired sample t-test, a Pearson *r* correlation test, and a chi-square test. The PSS pre-test produced data on the baseline measure of stress at the start of the investigation. The post-test was administered after the self-care intervention activity to

inform of the changes in stress levels. The self-care activities questionnaire (OSPN INC) enabled participants to record the reduction in stress after completing each activity in numeric and textual formats over the six weeks.

The Plan phase of the PDSA model represented several pre-implementation essentials that included (a) a literature review on the topic, (b) a flyer and an introductory letter to participants, (c) selection of a stress measurement tool (the PSS), (d) selection of an educational intervention (a PowerPoint on self-care), (e) a self-reporting instrument (daily log/OSPN INC) for participants, and (e) consents from relevant parties. In the Do phase, the intervention was administered and measured. Psychiatric nurses were asked to engage in self-care activities; the amount and frequency of the activities were self-recorded; and stress scores were obtained before and after the intervention and were measured for change. The Study phase entailed a comparison of the pre-and post-intervention stress scores, and analysis of the data to ascertain the meaning that was gleaned from the implementation phase. The Act phase was the phase in which recommendations were given.

The MFI served as a comprehensive guide to the planning, implementation, evaluation, and dissemination of the project. In so doing, all aspects of the project, from its beginning to conclusion, were addressed. Following this step-by-step process increased the likelihood that the project would result in quality improvement within the psychiatric departments represented.

Conceptual Definitions

The following section defines the key concepts of this project:

Body, Mind, and Spirit: Body, mind, and spirit involve a focus on the entire being. The body is the physical structure of the individual, composed of many different types of cells, tissues, and organs. The mind is the mental/emotional part of the individual. The mind is where thinking, feelings, reasoning, and judgment occur. Definition of the spirit varies. Depending on spiritual orientation, it may be referred to as God or the energy field within the individual (Sanctuary Sedona, 2018). The dimensions of body, mind, and spirit were the focus for the implementation of the self-care activities.

Burnout: Burnout is a psychological syndrome involving a prolonged response to chronic interpersonal stressors on the job. Emotional exhaustion is the first warning sign there is a problem with the job. Due to the exhaustion overload, people begin to feel hopeless, helpless, and incompetent (Leiter & Maslach, 2017).

Psychiatric Nurses: Psychiatric nurses are also called mental health nurses. They are responsible for the care of the mentally ill. Within this specialty, nurses assess the mental health needs of individuals, families, groups, and communities. Through the application of the nursing process, psychiatric nurses can assess, diagnose, and implement a plan of care for those with mental illness and are able to identify at-risk individuals for mental disorders (American Psychiatric Nurses Association [APNA], 2020).

Psychiatric Patient: A person who has experienced significant changes in thought processes, emotions, and or behavior. The person has difficulty functioning in work or family activities and a social milieu. Their psychological condition can render them incapable of meeting their activities of daily living or cause them to become a threat to themselves or others (American Psychiatric Association, 2020).

Self-Care Activities: Richards et al. (2014), Ross et al. (2017), and Mills et al. (2018) describe some of the self-care activities as having a nutritious diet, engaging in exercise, getting adequate rest, abstaining from abusing substances, pursuing recreational activities, spiritual practice, and meditation. These behaviors help the individual to cope with the effects of emotional and physical stressors.

Stress: Hans Selye (1975), the stress theory pioneer, believed that stress is the body's response in a nonspecific way to a noxious stimulus or stressors within the environment. However, more recent findings have shown that stress can be activated by psychological influences as well (McCance et al., 2019; Tan & Yip, 2018; Yaribeygi et al., 2017). The American Psychological Association describes stress as the physical or emotional response to stressors, whether internal or external (2020).

Stressor: Any stimulus that induces physical or emotional stress. The stimulus may be internal or external and requires the affected individual to adjust or use coping strategies (American Psychological Association, 2020).

Well-being: This is a state where people feel happiness and contentment. It encompasses overall good physical and mental health and outlook (American Psychological Association, 2020).

Literature Review

Pathophysiology of Stress

The physiological consequences of the stress response involve the activation of the Hypothalamic Pituitary-Adrenal (HPA) Axis. When the HPA is triggered, it releases corticotrophin-releasing hormone (CRH), which in turn stimulates the production of adrenocorticotrophic hormone (ATCH) in the pituitary. The subsequent release of ATCH

from the pituitary gland stimulates the adrenal cortex to secrete cortisol into circulation. The release of these hormones and chemicals prepares the body for emergency. Under short term, the mechanism of the stress system is protective, and the body can adapt. However, prolonged activation of the stress system can become maladaptive and can lead to a pathogenic state. It is important to note also that the physiologic and psychologic response to stress depends on a system of interdependent processes: (a) the type of stress, (b) the intensity and prolongation of stress, (c) the individual's perception and appraisal of stress, and (d) personal coping ability (McCance et al., 2019).

Occupational Stress in the Nursing Profession

A large body of research has identified factors affecting the multiple stressors nurses experience in the workplace. These range from ineffective management, short-staffing, poor nurse-to-doctor relationships, communication with patients and their family members, working on holidays, work overload, improper preparation and/or lack of experience for the task, long working hours, and dealing with human suffering and death. Such stressors can impact nurses' physical and mental well-being, creating negative consequences on their productivity and ability to provide quality patient care (Barbe et al., 2018; Flanders et al., 2020; Keykaleh et al., 2018; Lin et al., 2016).

Faremi et al. (2019) stressed the negative impact which job stress can create for nurses, such as poor mental and physical health, an inability to cope with job demands, job dissatisfaction, and an increase in turnover rates. The authors also stressed the reality of increasingly stressful factors within the delivery care system that will continually increase nurses' vulnerability to stress. Some of these are the increase in the aging population, the increased incidence of chronic illness, the intensity of health issues, and

the advancements in technology. They recommended that employers initiate measures to reduce the levels of occupational stress experienced by nurses.

From their data findings, Safaris et al. (2016) stated that job-stressors can negatively affect nurses' mental and physical health as well as their caring behaviors toward their patients. Their findings support other studies showing how occupational stressors within the healthcare environment are sources of many mental and physical disorders, such as hypertension, duodenal ulcers, immune and endocrine disorders, anxiety, depression, and dysthymia. Research results support the need for interventions to reduce work-related stress.

The onset of the recent pandemic has further increased stress in the workplace for nurses. Many healthcare systems were taken off guard by the unprecedented and rapid spread of the virus in late 2019, and early 2020 as demands for resources increased dramatically. Nurses, as fundamental workers in the healthcare system, were challenged by the high demands and the lack of adequate resources. In addition, they were required to put their own well-being at risk (Akkuş et al., 2022; Clari et al., 2021). Numerous studies now demonstrate that COVID-19 has been a source of increased levels of depression, anxiety, stress, and burnout among nurses, especially those who were combatting the disease at the forefront (Ali et al., 2021; Arnetz et al., 2020; MHA, 2021; Sampaio et al., 2021).

Occupational Stressors for Psychiatric Nurses

Although the nursing profession can be stressful in general, most studies examining occupational stress in psychiatric nurses agreed that psychiatric nurses are exposed to high stress levels due to physical violence and verbal assaults from patients. In

addition to dealing with inappropriate patient attitudes, violence, aggression, and complex mental health, they also share many common factors in nursing that lead to occupational stress among nurses. Consequently, the high stress levels affect their physical and psychosocial well-being, leading to job dissatisfaction, burnout, and a negative impact on patient care (Masa'Deh et al., 2018).

The APNA 2008 position statement mentioned the pressing concern of workplace violence for all registered nurses but stated that the problem was a greater concern for psychiatric nurses (APNA, 2008). The national survey conducted on nonfatal workplace violence between 1993–2009 by the US Department of Justice (n.d.) showed that mental health professionals were at higher risk for being victimized in the workplace. Kelly et al. (2016) online research with a large public psychiatric hospital in California showed that 69.5% of the participants had experienced workplace violence within the previous 12 months. The authors also stated that an individual's reactivity could affect the severity of the consequence. In addition to highlighting the importance of safety protocols in the workplace, the authors also mentioned the importance of the need for management to institute self-care measures to help improve staff's physiological and physiological health

The profession of nursing is considered a caring profession; this exposes nurses to secondary traumatic stress because of shared trauma with their patients. Nurses experiencing this condition tend to suffer emotionally. Problems they face include sleep disturbances, recurrent thoughts or distressing dreams, and even flashbacks of traumatic experiences (Bock et al., 2020). Zerach and Shalev (2015) examined this problem among Israeli psychiatric nurses and found this to be a problem in this specialty, especially among psychiatric nurses who work in acute care settings. This is because the inpatient

nurses have closer and longer contact with the patients, and constant listening to patients' traumatic experiences. They concluded this reality have been linked with increased levels of dissatisfaction of nurses and burn-out of nurses in both settings. The recommendation is for the promotion of mental health intervention programs for nurses.

Wang et al. (2015) explored the relationships among work stress, resourcefulness, and depression levels among psychiatric nurses from six medical centers in Taiwan. Although they found that work stress was a predictive factor for depression in psychiatric nurses in general, they also found that different variables impacted the nurses' stress levels differently. Nurses who were single had significantly higher depression levels than nurses who were currently married. The nurses with higher stress levels and lower personal resourcefulness had higher levels of depression. Those with greater resourcefulness had lower work stress and, thus, lower depression levels. They also found that nurses working in acute units had significantly higher depression levels in comparison to their nonacute colleagues. The reason cited for this is that those in acute settings are exposed to higher work stress, which involves constant confrontation with violence, suicide, or sudden occurrence of acute psychosis.

To determine the prevalence of job stress and methods of coping among psychiatric nurses, Hasan et al. (2018) conducted a study of 70 psychiatric nurses in Port-Said, Egypt. The nurses reported that working in mental health care was very stressful. Factors creating high stress for the nurses included (a) dealing with verbal and physical abuse from both patients and others; (b) receiving insufficient training to deal with such behaviors; (c) dealing with the possibility that psychiatric patients may commit suicide;

and (d) dealing with unpredictable and demanding behaviors of patients. Poor communication and heavy workloads were also stressors for these nurses.

The authors found that the nurses' self-assurance and the beliefs that the work they do will be appreciated by others were the most common coping strategies they utilized. Another coping strategy found was confidence in their abilities to perform their job well. From the results of the research, the authors were able to state that the nurses coping strategies significantly influenced their stress and depression levels. The conclusion arrived at from this research was that psychiatric nursing is a stressful assignment and some aspects of it create more stress than others, but methods geared towards improving their coping mechanism and problem-solving abilities could increase psychiatric nurses' abilities to deal with occupational stress.

Hasan and Tumah (2019) studied 119 psychiatric nurses working in a hospital in Jordan to assess job-related stress, coping strategies, and psychological distress among them. The sample audience rated psychiatric nursing as a severely stressful occupation. The factors the nurses felt created the highest level of stress for them were (a) communication with physicians; (b) patient violence; (c) inadequate job training for working with this complex patient population; (d) working with patients who endorsed suicidality and had the potential to act on it; (e) coping with high needs patients; (f) dealing with patients who were volatile and unpredictable; and (g) high workload. The majority of these nurses experienced high levels of anxiety and depression as a result of their work-related stress. Coping mechanisms varied with everyone, but the rewarding aspect of the profession, defined as their benefit to others and ability to excel in their role, acted as sources of pride and enhanced the coping abilities of the majority of them. The

researchers recommended that psychiatric nurses be taught about the detrimental effects of stress so they can develop more effective coping mechanisms.

When Dehvan et al. (2018) examined the relationship between mental health and resilience among 60 psychiatric nurses working in a hospital in Iran, they found that the nurses had poor mental health. This was a result of the stressful work situation the nurses were exposed to, which caused them to be physically and mentally exhausted. Dehvan and colleagues stated that the nurses working in mental health were at greater risk of experiencing stress than other nurses due to their direct contact with patients with mental disorders in an environment that is highly stressful by nature. The authors found a significant positive relationship between mental health and resilience. Thus, they suggested the need for psychiatric nurses to manage their mental health through the development of resilience.

Foster et al. (2018) supported the need for resilience to improve mental wellness among psychiatric nurses. They pointed out the many workplace factors creating stress for psychiatric nurses, ranging from interpersonal, organizational, and practice-related issues. They acknowledged that the cumulative effects of stress could lead to poor health outcomes for nurses, compromise the quality-of-care provisions, and affect the retention of nurses. Thus, they suggested the need to implement resilience programs, which are strength-based preventative approaches, to help reduce work-related stressors.

Hanrahan et al. (2010) investigated the impact of organizational factors on inpatient psychiatric nurses' mental wellness in the US. Psychiatric nurses were more likely to experience mental exhaustion with (a) a lower level of nurse-to-patient staffing ratio, (b) managers who were not effective, (c) poor nurse-physician relationships, and

(d) a poor work environment. Citing the unique challenges psychiatric nurses are exposed to such as verbal aggression and work injuries, they concluded that nurse managers should focus on quality improvement programs to improve psychiatric nurses' well-being, thereby optimizing patient care.

Burnout

The number of nurses reporting that they leave the profession secondary to burnout seems to be increasing. Data findings from the 2008 National Sample Survey of Registered Nurses (NSSRN) showed that about 17% of nurses left their position because of burnout (US Department of Health and Human Services, 2021). More recently, a secondary analysis of cross-sectional survey data from the NSSRN, including over 50,000 registered nurses in the U.S, collected from April 30 to October 12, 2018, found that 31.8% cited burnout as a reason for leaving their job that year. The cross-analysis survey observed that burnout was associated with a stressful work environment and was higher in nurses who worked in acute care (Shah et al., 2021).

Burnout may be caused or aggravated by certain factors. Long exposure to work-place violence acts as a cumulative stressor for nurses and can lead to burnout (Kobayashi et al., 2020). A systematic review and meta-analysis by López-López and colleagues (2019) examined the prevalence of burnout among psychiatric nurses and the factors leading to it. Specific factors included excessive workload, professional seniority, dealing with hostile situations, and short staffing. From a sample (n = 868), the meta-analytic prevalence estimation of burnout was as follows: 25% had high emotional exhaustion, 15% had depersonalization, and 22% had low personal accomplishment. The authors also cited the negative impact the phenomenon can have on the healthcare

delivery system in terms of the risk of an increased mortality rate of the patients, absenteeism, and turn-over rate. They recommend that managers address two aspects of burnout among employees: emotional exhaustion and low accomplishment (2019).

Findings from a systematic review by Edward et al. (2017) revealed that emotional labor of psychiatric nurses could lead to burnout. Emotional labor was described by the authors as the effort that one has to consume to suppress one's own emotions to render effective care to others while simultaneously caring for themselves. Psychiatric nurses have to constantly care for patients with bizarre and complex needs and who are sometimes difficult to engage in a therapeutic rapport. After reviewing 20 articles comprising quantitative and qualitative studies, the authors stated that there is clear evidence that the constant stress of caring for this special population can cause emotional labor for the nurses, which increased their vulnerability to emotional exhaustion and burnout.

Meta-analyses of 19 studies on the prevalence of burnout in mental health nurses in China by Zeng et al. (2020) revealed that burnout was common in mental health settings. Work-related stress was cited as the factor creating burnout for these nurses.

Nurses with less work experience were more susceptible to burnout. They recommended urgent interventions to increase nurse resilience, thus, decreasing burnout.

Impact of Self-Care Activities

The ANA Code of Ethics (Lachman, 2015) reinforced the concept of self-care for nurses in Provision 5 as a duty the nurses owe to themselves. The code emphasized that nurses should not neglect themselves while caring for others. They should benefit from the same care they provide to help others achieve or maintain health, safety, personal, and

professional growth. The focus on self-care for nurses in this imperative statement clearly indicates nurses' ethical responsibility to take care of themselves before they can provide effective care to their clients. Therefore, self-care for nurses becomes a duty, not an option. The following aspect of the literature review focused on the benefits of self-care activities that are aimed at the body, mind, and spirit.

Mind/Body/Spirit

Physical Activities

Physical activities are associated with better emotional well-being (Bernstein et al., 2019; Edwards et al., 2017). Physical activities are associated with better emotional well-being (Bernstein et al., 2019; Edwards et al., 2017). Bernstein et al. (2019) found when 76 young adults engaged in voluntary exercises, the physical activities can act as a buffer against a person's prolonged negative state of mind and increase such a person's ability to manage his or her emotion or recovery from changes in the environment. From their study of measuring participants' response to negative film clips before, during, and after exercise, Edwards et al. (2017) suggested that there is evidence that exercise can help to regulate people's emotions.

A study that was done on elderly Oslo men demonstrated that physical activity was important in reducing mortality risk. The study examined the relationships between physical activity, smoking, and 12-year cardiovascular, non-cardiovascular, and all-cause mortality in these subjects during the first decade in the 21st century. Results at 12-year follow-up showed a 40% mortality risk reduction in participants who performed 30 minutes of physical activity for six days per week. This benefit was comparable to the benefits gained from smoking cessation (Holme & Anderssen, 2015; Riegel et al., 2017).

Yoga

Yoga as a stress reduction technique has been studied for many years. The practice has been gaining more attention in recent years although it is not as popular in the medical literature (Anderson et al., 2017). Yoga is a mind-body exercise practiced for many years by people around the world for health promotion and symptomatic management (Zou et al., 2018). The practice involves full stretching of the body and relaxation, slow voluntary movements, diaphragmatic breathing techniques, and meditation (Zou et al., 2018). Anderson and colleagues, who performed a study on the impact of yoga on nurses' stress levels and muscle fatigue, concluded that yoga could be viable in reducing stress and muscle tension in nurses (2017). Tong et al. (2021) study of the impact of yoga on 191 college students found that yoga was helpful in increasing positive emotions and decreasing negative emotions, thus reducing stress among the participants. From their findings, the researchers believed that the practice of yoga by these college students could help them to cope with stressors and large challenges.

Prayer

Spirituality can increase a person’s resilience to stress. Prayer as a religious activity can help reduce stress, anxiety, depression, and aggression, improving one’s overall mental health (Achour et al., 2019; LaBarbera & Hetzel, 2016). LaBarbera and Hetzel showed through a one-way analysis of variance (ANOVA) that there was a statistically significant relationship between frequent prayers and job satisfaction. The researchers were able to conclude that frequent prayers could impact one’s mental health in a positive manner and play a role in ameliorating job stress (2016). Achour and

colleagues had similar conclusions in their randomized study of 300 Muslim nurses (2019).

Journaling

Journaling allows a healthy way for self-expression. The practice can help to manage stress, anxiety, and mental health conditions (University of Rochester Medical Center Rochester, 2021). Pennebaker (1997), who was one of the first researchers in journal writing, found the practice to be a good tool for psychotherapy. He found that people had short-term increase in physiological arousal and long-term decrease in health problems when they wrote about events that were emotionally difficult for 20 minutes per day during a four-consecutive day period (US Department of Veterans Affairs, 2021).

High correlations have been found between gratitude, psychological well-being, and satisfaction with life (Hausler et al., 2017). A randomized control trial was conducted over seven days with over 200 hospitalized patients who were either admitted for attempting suicide or endorsing suicidal ideation. The intervention group completed a gratitude journal every evening of all the events and things for which they were grateful. While completion of the gratitude journal did not result in a significant reduction in suicidality in the participants, the intervention showed efficacy in reducing depression and anxiety levels significantly, as well as having a positive impact on psychological pain (Ducasse et al., 2019). (Ducasse et al., 2019).

Konje (2016) did a qualitative self-project of journal entries that were compiled over five years to show how journaling can have positive health benefits and provide a healing effect. The author felt that the expression of her thoughts through journaling offered her a way of coping with stressors and was a source of increasing her resilience,

which also helped her to learn and heal. She felt that journaling brought about the integration of her body, mind, and soul and provided the balance that fostered healing for her and increased her self-awareness and acceptance.

O'Connell et al. (2017) randomized trial on the effect of gratitude journaling found that when participants journaled the things that they were grateful for, they were able to trigger positive feelings of gratitude. They were also able to increase their level of motivation. The authors concluded that gratitude could provide some crucial benefits.

Meditation

Meditation has a long history of use. The practice involves the mind and body and has been used to promote calmness and physical relaxation, improve functional coping and psychological balance, and enhance individual overall health and well-being. The practice takes many forms, but most consist of four common elements: a quiet location, a comfortable position, focused attention, and an open attitude (National Center for Comprehensive and Integrative Health, 2021). An eight-week study by May et al. showed that meditation was efficacious in reducing stress and improving participants' well-being (2020).

Mindfulness meditation is a common component of yoga and is considered a form of mental training. The practice can vary, but it is generally associated with deep breathing and an awareness of one's body and mind. Mindfulness meditation is a way of paying attention to the present moment in a non-judgmental way (Bryan, 2021).

Research has shown that practicing mindfulness can result in a change in brain structure and function through neuroplasticity (Davidson & Lutz, 2008). According to the American Psychological Association (2019), a considerable amount of research has

found mindfulness to be especially effective in mood enhancement; it has been shown to decrease stress, anxiety, and depression in people. Mindfulness has been helpful in treating depression, pain, smoking, and addiction.

Music

Musical intervention has a positive effect on both physiological arousal and psychological stress and hence can be beneficial in stress reduction. Recent neuroimaging studies have shown that music may influence the part of the brain structure that plays an important role in the regulation of our emotional processes by releasing "feel good" chemicals known as endorphins (de Witte et al., 2020; Fallon et al., 2020). De Witte and colleagues performed two multilevel meta-analyses consisting of 104 randomized control trials to assess the strength of the effects of music interventions on physical and mental stress-related outcomes as well as to test the potential moderators of the intervention effects. They found significant moderating effect for vital signs and hormone levels, which were the physical stress-related outcomes. The conclusion was that music intervention could serve as an effective stress reduction method (de Witte et al., 2020).

Chanda and Levitin (2013) found that music reduces stress and anxiety and improves immune system function. Listening to music also resulted in postoperative patients having lower requirements for opiate drugs for pain.

Gaps in the Literature

The literature review has shown that the nursing profession is stressful, but it has also demonstrated that there is a significant gap in the study of stress in psychiatric nurses in the United States. Most of the studies on occupational stress in psychiatric nurses originated outside of the United States. The body of literature also mentioned the need for

stress reduction interventions, but none applied self-care activities which is a stress reduction technique that is readily available to every nurse. This evidence gap underpinned the purpose of this project which was to examine the effect of occupational stress in psychiatric nurses and to measure the impact of self-care activities.

Summary

Stress is a universal phenomenon and is a reality in the nursing profession. Stress has been shown to disturb homeostasis resulting in poor physiological and psychological health outcomes (McCance et al., 2019; Yaribeygi et al., 2017). Self-care activities can enhance the nurses' coping skills, leading to better health outcomes. Improved physiological and psychological health of psychiatric nurses can improve the care provided to the increasing number of mentally ill patients in the US. However, it must be underscored that self-care for nurses is considered an ethical duty and is not an option or luxury according to the ANA Code of Ethics.

CHAPTER 3

METHODOLOGY

The literature review discussed the deleterious effects of occupational stress in psychiatric nurses (Dehvan et al., 2019; Hasan et al., 2018; Masa'Deh et al., 2018). Stress must be addressed to preserve the health and well-being of these nurses. This project attempted to address the issue of stress in this population by seeking to promote self-care. Self-care activities are meaningful interventions that can help to manage occupational stress (Blum, 2014; Lloyd & Campion, 2017; Posluns & Gall, 2020). The methodology chapter for this investigation described the approach used for the design of the project, its parameters, population and sample, procedures and protocol for data gathering, inclusion and exclusion criteria, and the intervention.

Project Design

This project used a mixed-methods approach that utilized a combination of qualitative and quantitative procedures for answering the project questions. Quantitative studies are observational, and the data generated are numerical **(**Schoonenboom & Johnson, 2017). Qualitative studies, on the other hand, gather data in rich textual, non-numerical forms from several data-gathering tools such as questionnaires, interviews, participant observation, and focus groups **(**Schoonenboom & Johnson, 2017). The psychiatric nurses were asked to express their stress levels in numerical form (quantitative data) using the PSS tool before and after participating in self-care activities.

As the respondents participated in the series of self-care activities, they also responded in numerical form, measured by the OSPN INC (quantitative data), and in textual form, via journal entries (qualitative data). The self-care activities focused on the domains of the body, mind, and spirit. Nurses were asked to participate in one activity from any domain for four days per week for about 20 minutes each day. The project lasted for six weeks.

Hypotheses:

H_a: The mean of the posttest total scores on the PSS will be significantly lower than the mean of the pretest total scores

H_o: The mean posttest total score on the PSS will not be lower than the mean pretest total score on the PSS.

Independent Variables: Self-care activities.

Dependent Variable: Occupational stress.

Setting

Initially, the project setting was intended to include subjects recruited from the websites of four psychiatric organizations, as well as a snowball sampling method. The snowball technique is a recruitment method in which participants who are part of the study give the researcher the names of one or more potential participants (Kirchherr & Charles, 2018). The organizations were the American Psychiatric Nurses Association, the Michigan Psychiatric Nurses Association, the Association for Ambulatory Behavioral Healthcare, and the Association of Behavioral Healthcare; however, none of the organizations responded. Therefore, the sample was determined by the snowball sampling method. The snowball sampling method began with the project manager

recruiting some psychiatric nursing friends and associates and having them assist in identifying other participants. The sample was composed of psychiatric nurses who worked in various psychiatric locations in the Midwestern region of the US.

Population & Sample

Population

The population was drawn from nurses through chain referrals. The demographic variables included gender, age, marital status, ethnic makeup, work setting, years of experience in psychiatric nursing, and educational level.

Sample/Power Analysis

To achieve an effect size of 0.5, with a power of 0.8, and an alpha of ≤ 0.05, a sample size of 30 participants ($n = 30$) was recommended by the statistician (H. Bernard, personal communication, September 20, 2021). Since the usual response rate to a questionnaire is approximately 40% (Creswell, 2009), I attempted to recruit at least 80 mental health nurses from acute and outpatient settings to achieve the required sample size of $n = 30$. The participants had to meet the inclusion and exclusion criteria outlined below.

Inclusion and Exclusion Criteria

The inclusion criteria included that participants were 18 years and above and were English-speaking. Participants had to hold a full-time, part-time, or per diem position in psychiatric nursing. The participants also had to agree to participate in the project through providing their email addresses and consenting to the study by completing the demographic information along with the survey. In addition, the participants must have

access to a computer, internet access, and an email address. Exemption criteria included non-English speakers, non-psychiatric nurses, psychiatric nurses who did not work as staff nurses, and those without internet/computer access or an email address.

Data Collection, Procedures, and Protocols

Selection of Instruments

This project used two instruments for data collection: the PSS and the OSPN INC. The first instrument was the 10-item PSS tool. The PSS was developed by Cohen and Williams in 1988 and is one of the most widely used psychological tools for measuring stress appraisal (Baik et al., 2019; Cohen et al., 1988; Ezzati et al., 2014). The PSS was developed in accordance with Lazarus and Folkman's (1984) transactional model of stress. The theory states that stress is the result of an imbalance between individual appraisal of the stressor and their coping resources. The PSS evaluates the degree to which the external demands exceed a person's perceived capability to handle the given situation (Chiu et al., 2016). The questionnaires are designed to assess the degree to which respondents find their lives to be unpredictable, uncontrollable, and overloaded during the past 30 days, using a 5-point Likert scale (1 = *never* to 5 = *very often*). Items 4, 5, 7, and 8 are worded positively; the remaining items are stated negatively. The scores are determined by first reversing the scores for the four positively worded items**,** then adding up the scores from all items. The total score ranges from 0 to 40. Higher scores correspond to higher perceived stress levels (Baik et al., 2019; Chiu et al., 2016; Ezzati et al., 2014). The alpha coefficient of the PSS 10 is .78, demonstrating good internal reliability (Cohen et al., 1988). Because the PSS makes a general assessment rather than focusing on specific events or experiences (Baik et al., 2019; Chiu et al., 2016; Ezzati et

al., 2014**),** the instrument was modified for this project by adding the words “at work” to each item to make it specific to this project. The modification was adopted from a similar scholarly work (Njume, 2020).

The second instrument was the OSPN INC. Once participants consented to participate in the self-care intervention, they were sent the self-care PowerPoint presentation. They were asked to undertake various daily activities over a six-week period. They were to choose one activity from any category each week (with the option to change the category daily or weekly), which was geared to lower their stress level and increase their coping skills and sense of psychological well-being. These activities were measured via the questionnaire OSPN INC. This questionnaire used a five-point Likert-type scale, ranging from a low of one to a high of five (*where 1=still stressed, 2= less stressed, 3= relieved/lighter in spirit, 4=feeling upbeat, 5=ready to cope with my day*) to elicit responses in the three categories; namely, mind, body, and spirit. This questionnaire required that participants record their daily activities by rating how the activity made them feel after completing it according to the scale shown. In addition, participants had the option of journaling their feelings in the comments or reflections section of the log/questionnaire.

The OSPN INC questionnaire was developed specifically for this project by Andrea Baldwin, Ph.D., who was the methodologist for this project. It was checked for content validity by experts in the psychiatric nursing field and for construct validity as it relates to the types of activities that contribute to stress reduction as noted in the literature review. It was also reviewed for ease of understanding, logical flow of the questions, and estimated time for completion; the estimated time was less than 5 minutes (without

comments/reflection). Additional time for completion would vary depending on the length of any comments/reflections that respondents would offer. Reliability analyses were performed for each dimension (mental, physical, and spiritual); the Cronbach's alpha coefficient for each dimension was .99. Given that psychiatric nurses are susceptible to many of the occupational stressors experienced by other nurses as well as multiple forms of aggression, hostility, and on the job assaults (Kelly et al., 2016; Zaki, 2016; Zaki & Barakat, 2018), the OSPN INC questionnaire elicited and promoted intentional self-care as an antidote, a relaxation technique, and a health-affirming strategy for coping with stress among them.

Intervention

Implementation of the self-care intervention included a PowerPoint presentation with interventions based on a holistic approach of body, mind, and spirit. The presentation was sent to participating psychiatric nurses via email. Emails of encouragement were sent each Monday. Additional email messages were sent on Thursdays and Sundays as reminders and encouragement to continue with the intervention process. Initially, the plan was to send only one email mid-week as a follow-up reminder, but a lower response rate after the Thursday reminder prompted a second reminder email as an added measure to keep the participants motivated.

The nurses were guided to participate in activities intended to help them experience change in the areas of body, mind, and spirit. Response to stress takes place in the body, mind, and spirit of the person regardless of the exogenous source of the stress (Grafton & Coyne, 2012). Therefore, to optimize the health and well-being of the nurses, the focus included their mental, physical, and spiritual dimensions. They were asked to

choose one activity from one of the three categories for four days each week for six weeks. Participants were given the option to change their category daily or weekly. The intervention was as follows:

1. Mind: Four days out of each week, participants were encouraged to spend about 20 minutes doing some motivational reading, writing in a gratitude journal or journaling, listening to relaxing or uplifting music, or meditating/reflecting on positive things in their life. They were asked to comment on the impact these activities had on them. Web-based instructions were sent as a guide to those who had never meditated.

   Body: Four days out of each week, participants were asked to spend about 20 minutes walking, jogging, doing yoga, or other forms of exercise of their choice and to record how they felt after each physical activity.

   Spirit: Four days out of each week, participants were asked to spend about 20 minutes in devotional reading, prayer, or any other methods which would help them connect with the Divine or Supernatural in their life and to record the results.

   All participants had to send their completed OSPN INC log for each week by Sunday to the project manager. As logs were received each week, results were collated and analyzed for impact on the participants. Results were tabulated each week to determine whether each participant had successive improvements. At the end of the six weeks, the results were analyzed further to assess the overall effect on the stress levels of these psychiatric nurses.

Procedures for the Project:

1. Approval from Andrews University Institutional Review Board (IRB) was obtained (Appendix D).

   An introductory letter (Appendix E) and a flyer (Appendix F) were sent to potential participants two weeks ahead of time. The letter introduced the project manager, informed participants about the project, and invited them to participate. The flyer further advertised the project opportunity. The project manager's contact information, a cell phone number, and email address, were included in the introductory letter and flyer. Participants were asked to contact the project manager so that follow up could be made with a link to the survey in the next two weeks.

   At the end of two weeks, all participants received an email with a link to complete the initial pretest, which was the PSS instrument with a section for the completion of their demographic data (Appendix G). The survey was offered via Class Climate. Class Climate is a survey tool that is mainly used in colleges to expedite and organize the process of data collection of students' evaluation of classes and faculty, but it can be used for general surveys (Estrella Mountain Community College, 2021). Class Climate is password protected per the Class Climate administrator (L. Carroll, personal communication, August 16, 2021). The survey availability lasted one week, but participants were encouraged to complete the survey within three days. Follow-up reminders were made with those who had not completed the survey within three days. For the purposes of the project, a week was denoted as Monday through Sunday.

At the end of the week, beginning on Monday, participants were sent the PowerPoint presentation along with the OSPN INC, where they were to record their experience with the selected stress reduction activity. They were asked to rate their experience using the scale and had the option to journal their experience. The participants submitted the OSPN INC/daily log every Sunday; each Monday, a new OSPN INC/daily log was sent to participants with an email of encouragement. The intervention PowerPoint presentation was sent only at the beginning; participants were asked to refer to the PowerPoint for the duration of the study. The participants received two further emails on Thursdays and Sundays to encourage and remind them to continue with the study.

The PSS post-scale was administered one week after completion of the intervention to ascertain whether there were changes in nurse stress levels over the previous 30 days. Each participant was thanked for taking the time to participate in the project and received a $10 Amazon gift card electronically after completion of the post-survey.

Confidentiality

In order to maintain privacy and confidentiality, data collection was completed without using personal identifiers except for email addresses. The email addresses, however, were never connected to the data as individuals were assigned codes. Email addresses were used only for project-approved communication with the participants for the sole purpose of the project. Participants' emails were not shared with anyone else. The link for participation in the survey was sent only to participants; they were instructed not to forward the link. The Class Climate account was password protected so that others

could not log in or see results. Specific information from the participants was not shared with anyone in their organizations and was not used for marketing purposes. Data are stored in a secure computer location accessible only with a password. Participants' data will be deleted from the computer after five years.

Protection of Human Subjects

The project was approved by Andrews University IRB. Participants had to give consent to participate in the project. Participants were fully informed in writing that the purpose of the project was to gain knowledge about occupational stress and to assess the impact of self-care activities. They were made aware that their participation was voluntary and that they had the right to withdraw from the project at any time.

Participants were informed that their data were strictly confidential. They were also informed that there were no known discernable risks to their physical or psychological safety and that by completing the online survey, they were consenting to be a part of the project. The participants were offered an electronic $10 Amazon gift card at the end of the project as a measure of gratitude for their participation.

Analysis/Evaluation

The rationale of this project was to investigate how psychiatric nurses, by intentionally caring for themselves (through a self-care intervention program), could reduce their stress levels and thereby improve patient care. The plan for analyzing and evaluating the PICOT question utilized a mixed-methods approach, which gathered data in quantitative and qualitative formats. Data gathering instruments were structured to require responses in both quantitative and qualitative formats. The OSPN INC enabled

participants to offer their comments/reflections in rich textual form. These comments/reflections added deeper insights into how psychiatric nurses were impacted by the stress-reducing intervention activities. The data analysis procedure for this project proceeded as follows:

1. The demographic data were entered into an IBM statistical analysis software, and descriptive statistics were used to describe them (Appendix H).

   The Perceived Stress Scale was used to collect quantitative data in the form of a pre-test. The PSS pretest was administered at the start of the project to ascertain the level of stress with which participants entered the research study (baseline data appears in Appendix I).

   The self-care intervention was administered over six weeks, during which participants used the OSPN INC questionnaire to record the impact of each day's activities. These results were analyzed by recording the frequencies (mode) of responses for each self-care activity for each week on an Excel spreadsheet in Class Climate. A summary of these responses appears in Tables 1-3 of Appendix J, which gives the modal response for each day's activities over the six weeks. This data allowed the project manager to see which activities were preferred and their effect on the participants as denoted by their responses on the rating scale of the OSPN INC. Comments/reflections were analyzed using a thematic approach, which enabled the project manager to comb the data for emerging repeated words and phrases, which were used as descriptors to make meaning of participant statements (Creswell, 2009). The most inclusive terms were used to summarize and present their meanings.

The PSS test was administered again at the end of the study as a posttest. A paired sample t-test was used to measure differences in scores and evaluate the difference in the means of the two tests. The level of significance was set at $p \leq 0.05$. Pearson *r* correlation test was conducted to measure the strength of the relationship between the pre and posttests. A chi-square test was done to indicate the number of subjects in each of the categories (high, medium, and low stress) in both the pretest and post-test to determine if there were any significant movements in the categories.

From the results of these statistical tests, it was possible to evaluate (a) the baseline stress level of participants, (b) the impact of the physical, mental, and spiritual self-care activities on stress levels, and (c) the change in stress levels as recorded by the posttest.

Implementation

After a successful proposal defense, and following approval from Andrews IRB on February 8, 2022, recruitment of subjects began by sending a flyer and an introductory letter two weeks prior to the initiation of the project. The introductory letter introduced the project investigator to potential subjects, informed them about the project, and invited them to participate. The flyer further advertised the project opportunity. The flyer and the introductory letter were uploaded to the web page of the participating nursing organizations and sent directly to potential participants via the snowball method. A link was sent to participants' emails after two (2) weeks. The link contained the demographic questions and the PSS pre-test.

The completion of the questionnaires indicated that the participants consented to take part in the project, and no further identifiable data were used apart from their email addresses. All participants were assigned a code. The email addresses were necessary to send and receive data from them. The PSS pretest survey and demographic questionnaire were opened for a week, but participants were encouraged to complete the survey within three days. Those who did not complete the survey within three days were sent reminders. The survey was then closed on a Sunday, which marked the end of the week; for the purpose of this project, a week is from Monday to Sunday. All surveys and the OSPN INC /daily log were done via Class Climate.

Participants who completed the surveys were then sent the PowerPoint presentation containing the self-care measures and the OSPN INC/daily log, where they recorded their feelings numerically and in textual language. Participants engaged in the self-care activities for four days each week for about 20 minutes each day for six weeks. At the end of each week, on a Sunday, all participants were expected to submit their daily logs via Class-Climate. Every Monday, they were sent an email of encouragement as well as a new daily log to record their feelings for that week.

The PowerPoint presentation was sent as a single intervention; participants were instructed to refer to the PowerPoint for the duration of the project. Every Thursday and Sunday, participants were reminded and encouraged to continue to engage in the self-care activities and to record their feelings. One week after the completion of the six-week intervention, they were sent a link to the PSS to complete as a posttest. Again, the survey was opened for one week, but the participants were encouraged to complete the survey within three days. The project manager followed up with those who did not complete the

survey within three days to provide prompting and encouragement. The survey was closed on Sunday of the final week. Each participant received a $10 electronic Amazon gift after successful completion of the survey (see Table 1 for the project's timeline).

Project Timeline

Table 1 below outlines the timeline of the project from its commencement to its end.

Table 1

Project Timeline

Timeline Dates	Events
February 14 – February 20, 2022	Recruiting process with introductory letter/flyer
February 28 – March 6, 2022	Pretest and demographic survey
March 7- March 13, 2022	Single PowerPoint intervention with self-care activities and link to OSPN INC for recording • OSPN INC submitted by Sunday • 2 follow-up encouraging/reminder emails (Thursday & Sunday) Data collection
March 14 – April 17, 2022	Intervention continued with single PowerPoint • Mondays—encouraging email and new link to OSPN INC • Sundays—OSPN INC submission deadline • 2 follow-up encouraging/reminder emails (Thursdays & Sundays) Data collection
April 25 – May 1, 2022	Posttest and data collection
May 2, 2022	Thanked participants, sent Amazon electronic gift card
May-September, 2022	Analysis and write up

Summary

Job-related stress can result in high physical and physiological consequences on psychiatric nurses and can create negative impact on the quality of patient care and efficiency in the healthcare system (Hasan et al., 2018; Khamisa et al., 2016; Itzhaki et al., 2018). This section discussed the specific methods that were used to identify, select, process, and analyze the project. The findings of this project have the potential to positively influence nursing practice in the future by improving the well-being of nurses, patient satisfaction, and efficiency in the healthcare system.

CHAPTER 4

DATA FINDINGS

Overview

This research study investigated the effects of occupational stress in psychiatric nurses and measured the impact of self-care activities. This was achieved by engaging participants in a guided intentional six-week program on self-care activities. The guiding PICOT question was: “In psychiatric nurses who are experiencing stress, how effective can the implementation of self-care activities be in reducing stress levels after six weeks of the intervention?”

Population and Sample

The population for this investigation was drawn from a pool of psychiatric nurses using the snowball sampling method of recruitment. These psychiatric nurses worked in clinics and hospitals within the Midwestern region of the US. A total of 22 participants entered the study. One participant did not complete the posttest (the PSS) and was eliminated from that part of the analysis. The participant completed the self-care activities and that data was analyzed for the self-care part of the study (see Figure 3 for the study flowsheet). For the PSS analysis, because the number of participants in some of the variable categories was small, in most cases, the categories were collapsed before making comparisons between them. Table 2 presents the demographic distributions of the sample using the collapsed and recoded categories. Of the 21 respondents, 57.1% were

age 40 or older, while 42.9% were in the age range of 18-39 years. Those with 1 to 11 years of experience accounted for 71.4% of the sample, while 28.6 % had 12 years or more of experience. Married participants/others represented 85.7% of the group, and 14.3% were single or divorced. Under race, 76.2% were Caucasians; minorities made up 23.8%. Table 2 also shows that 66.7% had Bachelor of Science in Nursing degrees, while 23.8% had Associate degrees in Nursing, and 9.5% had a Master's degree in Nursing.

Figure 3:

Study Flowsheet Chart

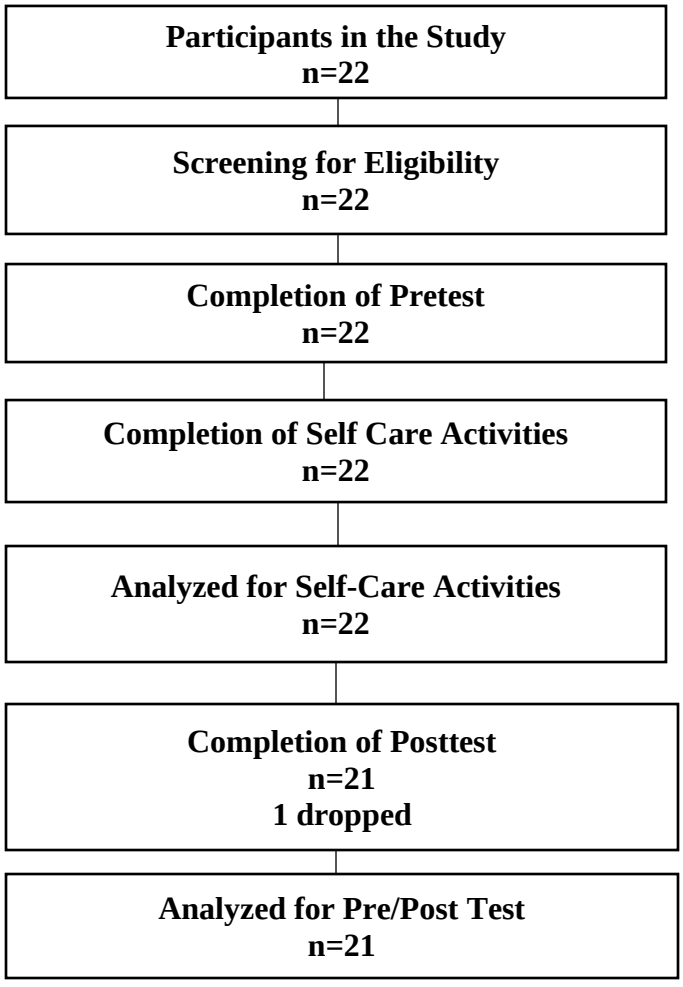


Table 2:

Demographic Data for the Sample (n = 21)

Variable	Categories	*N*	%
Age	18-39 years	9	42.9
	40 years and up	12	57.1
Years of experience	1 – 11 years	15	71.4
	12 years or more	6	28.6
Marital status	Single/divorced	3	14.3
	Married/other	18	85.7
Race	Minority	5	23.8
	White	16	76.2
Qualifications	ADN	5	23.8
	BSN	14	66.7
	Masters	2	9.5

Project Evaluation Instruments

Two instruments were utilized to measure stress levels and the impact of the self - care intervention program. The PSS was used to measure the change between pre-intervention and post-intervention stress levels among these psychiatric nurses. A quality improvement intervention of self-care activities was completed by the psychiatric nurses between these tests, and the results of this intervention were recorded using a questionnaire with a daily log, known as the OSPN INC.

Results of Data Collected and Evidence-Based Evaluation

Pre- and Posttest Levels of Stress Among Participants

Before the self-care activities were commenced, participants were asked to complete a pre-test using the PSS instrument to ascertain the levels of stress among

participants in week 1. The Cronbach's alpha reliability coefficient for the pretest was .83. As shown in the chi-square cross-tabulation of Table 3, the results of the pre-test revealed that the study commenced with nine participants in the low-stress group and ended with 12 (a gain of three participants). At the start of the study, there were 11 participants in the pretest medium stress group, and this was reduced to eight by the end of the six-weeks. After the six-weeks of self-care intervention, the PSS post-test was administered in week nine to the same participants. The Cronbach's alpha reliability coefficient for the posttest was .91. This placed confidence in the PSS seeing that it consisted of only ten items and the sample size was relatively small with 21 participants. These results indicate that, indeed, there were some significant movements in the right direction as a result of the intervention as three participants moved to the low stress category from the medium-stress category (chi square = 21.14, $df = 4$, $p = .00$). It was also determined through additional chi-square tests that the demographic variables of age, years of experience, marital status, race, and qualifications had no bearing on these results.

Table 3:

Chi-Square Results for Pretest and Posttest Categories of Low, Moderate and High Perceived Stress

Pretest/Posttest Frequencies	**Low Stress 0-13**		**Medium Stress 14-26**		**High Stress 27-40**		**Total**	
	n	%	*n*	%	*n*	%	*n*	%
Low Stress	5	23.8	4	19.0	0	0.0	9	42.9
Medium Stress	7	33.3	4	19.0	0	0.0	11	52.4
High Stress	0	0.0	0	0.0	1	4.8	1	4.8
Total	12	57.1	8	38.1	1	4.8	21	100

Comparative Results from the Pre and Posttests of the Perceived Stress Scale

The hypothesis for the PICO question was as follows: The mean of the posttest total scores on the PSS will be significantly lower than the mean of the pretest total scores. The null hypothesis was stated as follows: The mean post-test total score on the PSS will not be lower than the mean pretest total score on the PSS. The paired sample t-test was used to test the null hypothesis, and it was determined that the null hypothesis was retained ($t = 1.50$, $df = 20$, $p = .075$ one-tailed, see Table 4). The pretest score mean was 13.19 and the posttest score mean was 11.43, which was lower by 1.76 points.

A good measure of how consistently the PSS performed for the pre-and posttest was the size and direction of the correlation between those scores. Table 5 presents the means, standard deviations, and correlations for the pretest (PSS-1) and posttest (PSS-2) for $N = 21$ for both tests. The *df* for all *t*-tests = 20, and the *df* for all correlations = 21. The scale of the PSS test provided response options between 0 (*Never*) and 4 (*Very Often*). However, the responses of items number (4, 5, 7 & 8) that are positively worded were reversed during the scoring.

Table 4:

Means and Standard Deviations of the Pretest and Posttest Total Scores: t-Value, Correlation, and Corresponding One-tailed Statistics for the full PSS Scale

	Mean	***SD***	***t***	**One-tailed *p***	**Pearson *r***	**One-tailed *p***
Pretest total	13.19	6.36	1.50	0.075	0.66	0.00*
Posttest total	11.43	6.77				

*Note: * indicates a significant finding.*

Table 5:

Means and Standard Deviations of the Pretest and Posttest Scores: t-Values, Correlations, and Corresponding One-Tailed Statistics

PSS Item	Pretest Posttest	Means	*SD*	*t*	One-tailed *p*	Pearson *r*	One-tailed *p*
1	PSS-1 PSS-2	1.81 1.67	1.12 0.97	0.90	0.19	0.77	0.00*
2	PSS-1 PSS-2	1.24 1.24	0.83 0.77	0.00	0.50	0.61	0.00*
3	PSS-1 PSS-2	2.09 1.67	0.94 0.85	3.26	0.00*	0.78	0.00*
4	PSS-1 PSS-2	0.86 0.57	1.01 0.68	1.24	0.12	2.27	0.12
5	PSS-1 PSS-2	1.52 1.09	1.08 0.70	1.83	0.04*	0.33	0.07
6	PSS-1 PSS-2	0.81 1.24	0.60 1.09	-2.00	0.03*	0.45	0.02*
7	PSS-1 PSS-2	1.24 0.86	1.41 1.01	1.22	0.12	0.34	0.07
8	PSS-1 PSS-2	1.04 1.04	0.97 1.07	0.00	0.50	0.00	0.50
9	PSS-1 PSS-2	1.71 1.24	0.96 0.89	3.63	0.00*	0.79	0.00*
10	PSS-1 PSS-2	0.86 0.81	0.96 0.87	.021	.042	.038	0.04*

The null hypothesis was retained, but there was significance on some items on the 10-item PSS (3, 5, 6, & 9). However, Question 6 was an anomaly; participants responded in the pretest that they *Almost Never* could not cope with all the things they had to do at work, and they remained at the same point on the scale of the posttest. This could be due to external factors, such as lack of concentration or a misunderstanding of the question. The correlation for this question was found to be weak at r =.45. Question 5 showed that there was a direction toward the positive as participants indicated things were going their way at work fairly often after the interventions, with a decrease in the mean by 0.42 points from 2.09 to 1.67. The correlation for this was also weak at r =.33. Therefore, the two significant p values that will be discussed in detail will be questions 3 and 9 due to the stronger correlations at greater than 0.7.

The question for Item 3 read, "In the last month, how often have you felt nervous and 'stressed' at work?" The responses over the six-week period showed a decrease in the mean by 0.42 points from 2.09 to 1.67 (p = 0.00), r = 0.78. Thus, over the six-week period, the frequency with which participants were feeling nervous and stressed was less than before the intervention. Also, there may have been situations at work which impacted these workers negatively. The stronger correlation shows that participants were more consistent in how they responded to the questions between the pre- and posttests.

Item 9 read, "In the last month, how often have you been angered because of things that were outside of your control at work?" The difference in the mean between the pre- and posttests was 0.47 (p = 0.00), r = 0.79. The frequency of becoming angry over the six-week intervention decreased from a mean of 1.71 to 1.24. Again, the stronger

correlation shows that participants were more consistent in how they responded to the questions between the pre- and posttest.

Results of Self-care Intervention Program

As mentioned, the self-care intervention program consisted of three categories of activities (mental, physical, and spiritual) to be undertaken by participants over a six-week period. Each participant was required to choose one daily activity from several possible activities and perform this activity over four days per week for 20 minutes each day. Participants would then complete a daily log (OSPN INC) to report the impact on their level of stress after completing each activity

Results of Self-Care Activities: Mental Dimension

Table 6 shows the results of several mental activities in which respondents participated over the six weeks. These options included motivational readings, journaling, gratitude journaling, meditating/reflecting on positive things, and listening to uplifting music. Participants were asked to rate how these activities impacted them (using the rating scale (1 = *still stressed,* 2 = *less stressed,* 3 = *relieved/lighter in spirit,* 4 = *feeling upbeat, and* 5 = *ready to cope*). As shown, 22 participants completed the activities 250 times with bimodal responses ranging between 2 and 4 on some activities. Participants felt *less stressed* to *relieved/lighter in spirit,* or *upbeat* after the activities. In this mental dimension category, the most frequently practiced activity was listening to uplifting music. This occurred 78 times over the six weeks. Motivational readings followed with a frequency of 66 times over the six-week intervention period. Meditation/reflection on positive things occurred 61 times, journaling 27 times, and gratitude journaling 18 times over the six weeks.

Table 6:

Results of Self-care Intervention: Mental Dimension (n = 22)

Self-Care Dimension	Scale for OSPN INC (1 = *still stressed*, 2 = *less stressed*, 3 = *relieved/lighter in spirit*, 4 = *feeling upbeat*, 5 = *ready to cope with my day*) the most frequent response (mode) appears.		
	Number of times activity was performed	**Mode**	**% of Responses**
Motivational Readings	66	2 & 3	33.3 & 44
Journaling	27	5	57
Gratitude Journaling	18	2 & 3	37.5 & 40.0
Meditate/Reflect on Positive Things	61	3 & 4	33.3 & 44.0
Listen to Uplifting Music	78	4	57
Total	250		

Results of Self-care Activities: Physical Dimension

Table 7 shows the results of physical activities practiced over the six-week intervention program. The most common activities were walking, jogging, and yoga. Participants were asked to rate how these activities impacted them using the rating scale (1 = *still stressed,* 2 = *less stressed*, 3 = *relieved/lighter in spirit,* 4 = *feeling upbeat, and* 5 = *ready to cope*). As shown, 22 participants completed these activities 307 times with a modal response of 5 for 85.7% of the responses. This means that among the activities of walking, jogging, yoga, and others, participants most frequently felt upbeat and ready to cope with their day. Walking was the most frequently performed activity (160 times over six weeks), followed by activities in the other category (75 times over six weeks), then jogging (41 times over six weeks), and finally yoga (31 times over six weeks).

Participants were given the option of engaging in any other activity of their choice. The main activities chosen in the "Other' category were working out at the gym, riding/biking, doing light workouts, and doing boot camp workouts (see Table 8). Participants did not always indicate the activity of choice they did, which explains why the number under the other category for Table 7 totaled 75, but 43 in Table 8.

Table 7:

Results of Self-care Intervention: Physical Dimension; n = 22

Self-Care Dimension	Scale for OSPN INC (1 = *still stressed*, 2 = *less stressed*, 3 = *relieved/lighter in spirit*, 4 = *feeling upbeat*, 5 = *ready to cope with my day*) the most frequent response (mode) appears.		
	Number of times activity was performed	**Mode**	**% of Responses**
Walking	160	4	71.4%
Jogging	41	5	85.7%
Yoga	31	5	71.4%
Other	75	2, 4, & 5	25, 25 & 37.5
Total	**307**		

Table 8

Physical Dimension: Frequency of Responses in the "Other" Category

Type of Activity	Frequency	Percent of responses
Work out at Gym	17	39.5
Zumba & Workouts	3	6.97
Riding/Biking	7	16.27
Gardening & Housework	3	6.97
Workout (light)	9	20.93
Bootcamp class	4	9.30
Total	43	

Results of Self-Care Activities: Spiritual Dimension

Table 9 shows the results of several spiritual activities completed over the six weeks. These activities included devotional readings, prayer, and any other activity of choice denoted by other. Participants were asked to rate how these activities impacted them using the rating scale (1 = *still stressed,* 2 = *less stressed,* 3 = *relieved/lighter in spirit,* 4 = *feeling upbeat, and* 5 = *ready to cope*). As shown, 22 participants completed these activities 300 times with a modal response of 5 for both devotional reading and prayer. The modal responses for activities in the "Other" category ranged between 3 & 4. Thus, after completing devotional activities, 71.4 % of participants' responses showed they were ready to cope with their day, compared to 85.7% of responses after they had prayed. Of the three major categories of activities, prayer was the most frequently performed activity (135 times over six weeks), followed by devotional readings (119

times over six weeks), and then the activities that fell under the other category (46 times over six weeks). Among the main activities chosen in the "Other' category were watching inspirational movies, Bible studies, meditation, and connecting with self and others (see Table 10). As stated above, participants did not always indicate the activity of choice they did, which explains why the number under the other category in Table 9 is 46 and only 17 in Table 10.

Table 9:

Results of Self-Care Intervention: Spiritual Dimension

Self-Care Dimension	Scale for OSPN INC (1 = *still stressed*, 2 = *less stressed*, 3 = *relieved/lighter in spirit*, 4 = *feeling upbeat*, 5 = *ready to cope with my day*) the most frequent response (mode) appears.		
	Number of times activity was performed	**Mode**	**% of Responses**
Devotional Reading	119	5	71.4
Prayer	135	5	85.7
Other	46	3 & 4	33.3 & 55.5
Total	**300**		

Table 10:

Spiritual Dimension: Other Category

Type of Activity	Frequency	Percent
Inspirational movies	4	23.52
Bible studies	2	11.76
Share with others/connection with self	3	17.64
Drawing with a new medium	1	5.88
Watched sermon	1	5.88
Christian music	3	17.64
Meditation	3	17.64
Total	17	

Emerging Themes

Common themes were assessed by carefully examining the textual data; several themes were apparent. Over the six-week self-care intervention program, 43 comments were made for the physical dimension. Overall, the participants reported that they felt good and refreshed, stronger and more energized, and better able to cope after the self-care activities. Three meaningful responses follow: (a) “Additional stressors at this time, but with exercise at least I'm able to cope;” (b) “I like myself better. I feel that the exercise has made a BIG difference in my ability to handle stress. It is an (sic) stress reliever for sure…;” (c) “1.5 hrs. combination Vin-Yin yoga incorporating movement and stillness, very refreshing.” One individual reported still feeling stressed after engaging in

jogging. The participant said: “A lot of stressors on my plate, still feeling stress after jogging.”

Fourteen comments were made for the spiritual category. The main themes were that participants had a more positive mindset, felt stronger, more empowered, and were able to cope with their day. Three pertinent responses were: (a) “Praying helps with getting my day started with a positive mind set.” (b) “Prayers help me cope with stress and feel more relaxes (sic).” (c) “Mondays are always very stressful at my job…I just prayed on the problems and it always helps me to cope.”

Fourteen comments were gathered for the mental dimension over the six weeks. Participants reported that the activities increased their perception and self-reflection, gave them a spirit of gratitude, and made them feel upbeat and uplifted in spirit. Three pertinent responses follow: (a) “Christian music is my favorite, (sic) it lifts my spirits;” (b) “My reading helped me see several different ways;” (c) “…one hour massage relaxation and reflection—feeling upbeat with clear mind.” However, a response that was very different is that one participant reported that the self-care activity did not help in decreasing the level of stress for that week, possibly due to accumulated stress from the previous week. Here is what the participant had to say, “I think I was so stressed from the previous week, not much helped.”

Summary

The findings of this investigation have been revealed as follows:

1. The PSS test showed there were factors in the workplace that contributed to the stress levels of workers, as denoted by their responses to questions 3, and 9.

2. The chi-square analysis revealed that whereas there were nine participants in the low-stress level before the start of the intervention, this number was increased to 12 by the end of the intervention (as shown by the posttest). There were 11 in the medium stress level before the intervention, which was reduced to eight by the end of the intervention.
3. The results of the self-care intervention via the OSPN INC provided additional details beyond the examination of the mean responses and chi-square results. The OSPN INC revealed how participants responded to mental, physical, and spiritual activities. Each of these categories is presented with results:
    a. The results of the self-care activities on the mental dimension for the six-week intervention as measured by the OSPN INC showed that the most frequently performed activity was listening to uplifting music (78 times). The most frequently selected responses of the twenty-two participants were that they felt relieved/lighter in spirit or upbeat after the activities (a bi-modal response of 3 & 4).
    b. The results of the self-care activities for the physical dimension showed a modal response of 5, meaning that nurses felt that they were ready to cope with their day after participating in several physical activities over the six-week program. Walking was the most practiced activity for a total of 160 times (see Table 7 and Appendix J).
    c. For the spiritual dimension, the OSPN INC results showed that over the six-week intervention program, participants prayed 135 times and did devotional readings 119 times. The modal response was five showing that after

participants prayed and read devotional readings, they felt ready to cope with their day.

d. The use of the OSPN INC has been very effective in capturing the daily activities and responses of participants, adding an important level of detail to the investigation (for further details, see Appendix J). In addition, reliability analyses on the instrument were performed for the three dimensions, resulting in a correlation coefficient of .99 for each dimension.

CHAPTER 5

SIGNIFICANCE AND IMPLICATIONS

This chapter sought to summarize the major points of the study and the implications thereof. First, the findings were discussed, followed by an examination of new insights into the existing knowledge about this field of study, then the impact of the results on nursing practice, nursing education, and nursing research. Strengths and limitations of the project, the plans for disseminating the findings, the plans to sustain the intervention, and participant evaluations of the intervention were also discussed. The Doctor of Nursing Practice (DNP) Essentials, utilized in the project, were discussed.

Discussion of Study Findings

The aim of this project was to measure the impact of six weeks of self-care activities on psychiatric nurses who were affected by various levels of stress. The OSPN INC instrument was used; results appear in Tables 6 to 10 of Chapter 4. A positive impact on stress reduction among the 22 respondents was observed. The chi-square test showed significant movement in stress reduction from the medium stress level to the low-stress level. A concern arising from the results of the statistical analyses is that even though the self-care intervention program was effective in reducing stress among psychiatric nurses, if factors in the workplace exist to cause workers to continue to feel nervous or stressed, the positive results of self-care interventions could be erased easily. Therefore, nursing managers need to address these concerns among the nurses.

Insight into Existing Knowledge and Filling a Research Gap

The significance and implication of this investigation are that it has generated meaningful results that have provided new insight into existing knowledge about self-care activities, and it contributes to filling a current gap. As shown in Chapter 2, most research studies of stress in psychiatric nurses were of foreign origins. Very few have been completed here in the USA (Hasan et al., 2018; Dehvan et al., 2018; Hasan and Tumah, 2019; Hanrahan et al., 2010). This study contributes to filling this gap by undertaking and completing this study in the USA among a typical group of psychiatric nurses, with characteristics that are representative of the demographics of the USA (for example, 76.2% of the sample are Caucasians).

In addition, much of the literature review mentioned the urgent need for nursing managers and hospital administrators to initiate strategies to decrease work-related stress among nurses; none of those studies applied self-care as a measure to mitigate stress (Foster et al., 2018; Hasan et al., 2018; Kelly et al., 2016; Zerach and Shalev, 2015). This project responded to the gap by promoting self-care interventions as a means to improve and support the health and well-being of psychiatric nurses. The psychiatric nurses in this study were not practicing self-care intentionally, and 52% were exhibiting a medium stress level as measured by the chi-square test (see Table 3). In consultation with my methodologist, Andrea Baldwin, Ph.D., a self-care reporting instrument was developed to measure the specific self-care activities of psychiatric nurses in each of the three domains (body, mind, and spirit). This tool demonstrated successful measurement of self-care activities and could be adopted as an assessment instrument to measure responses to stress reduction activities.

Impact on Nursing Practice

Evidence-based research is important for improving practice (Li et al., 2019). This scholarly project was focused on providing an evidence-based approach to enhance self-care outcomes for psychiatric nurses, with the resultant improvement in patient care for the population they serve. The focus of the intervention was self-care activities measured over a six-week period for evidence of improvement in stress reduction. Dorethea Orem's theory of self-care, which formed one of the theoretical underpinnings for this work, placed emphasis on the need for self-care not just to guide and improve patient care but also to benefit the overall health and well-being of all individuals (Orem, 1995; Orem et al., 2001; Zaccagnini & White, 2021). Therefore, as nurses become less stressed, it is posited that patient care will likely improve.

This project has demonstrated that there were reductions in stress levels of nurses and improvement in their feelings of relief and ability to cope on the job as they engaged in the interventions over the six weeks. For example, activities in the spiritual dimension were done 300 times with a modal response of 5, meaning the participants were ready to cope with their day. Similarly, in the physical domain, the 22 participants performed physical activities 307 times with a modal response of 5 (readiness to cope with their day). This is evidence that the activities were beneficial to the participants. Consequently, these self-care activities can be utilized by psychiatric nurses to improve their own self-care and hence improve patient care. Because occupational stress is a key issue in the nursing profession, all nurses could benefit from self-care interventions, as supported in Provision Five of the ANA Code of Ethics (Lachman, 2015). These initial findings could be further validated in ensuing studies with larger samples.

Impact on Nursing Education

Nurses tend to place a high priority on the care of the vulnerable populations they serve while ignoring their own self-care (Blum, 2014; Drick, 2018; Hofmeyer et al., 2020). Most nursing programs are also designed to place emphasis on patient care instead of teaching students the importance of engaging in self-care, as evidenced by personal experience and research of the nursing curriculum of some of the major nursing schools in this country. Nursing programs can be physically and mentally challenging, causing nursing students to become susceptible to stress (Boulton & O'Connell, 2017; Green, 2019; Niedermeier et al., 2022). The results of this project showed that the inclusion of a self-care intervention model as part of the education curriculum in nursing schools could promote positive health behaviors among students and help in stress reduction. Also, since self-care is essential to the health and well-being of nurses and quality nursing care (Drick, 2018), it should become one of the competencies of continuing education for nurses as a constant reminder to nurses to focus on themselves.

Implications for Nursing Research

The results of this study have shown how an inexpensive and readily available intervention such as self-care activities can be beneficial in the reduction of occupational stress in a group of psychiatric nurses. Given that stress pervades the psychiatric department and given the nature of these activities, they could also be utilized as stress reduction techniques for nurses in other departments. Self-care for nurses is a high priority of the ANA and is a mandated call by the organization for nurses to take care of themselves (Lachman, 2015). In support of this mandate, this intervention program could

be adopted by departments, and further research and documentation on its positive effects be published.

Project Strengths

This project addressed the crucial issue of the need for self-care activities to improve the health and wellness of nurses and, consequently, quality improvement for patients. The need for nurses to focus on their health through intentional self-care is even more relevant today due to the ongoing COVID-19 pandemic, which has been a source of negative impact on the physiological and psychological wellness of nurses (Wei & Wei, 2022; Arnetz et al., 2020; Ali et al., 2021; Sampaio et al., 2021). Thus, this project has come at a crucial time as it helps to place focus on the need for self-care among nurses.

As known, the goal of healthcare is quality improvement to improve patients' outcomes and create a healthy nation (IHI, 2022; Centers for Medicare and Medicaid Services, 2021). Nurses are crucial in influencing quality improvement because they make up most of the healthcare professionals, and they have more direct contact with patients (AACN, 2022; Mahdavi et al., 2021). However, nurses tend to ignore their self-care, and thus it is difficult for them to give to others what they do not possess (Blum, 2014; Drick, 2018; Hofmeyer et al., 2020).

Two other strengths of this project relate to the instruments used. The PSS scale was found to be reliable for both the pre- and posttest. The Cronbach's alpha reliability coefficient for the pretest was .83; for the posttest, it was .91. This placed confidence in the PSS seeing that it consisted of only 10 items and the sample size was relatively small. The OSPN INC was developed specifically for this project, and it has been very useful in facilitating recording of detailed data for each domain of the study. The OSPN INC was

also found to be reliable, with a Cronbach's alpha of .99 for each dimension. This instrument, the OSPN INC scale, can be recommended for use in future studies.

Project Limitations

The main limitation of the study is the small sample size of 22 participants. For a power of .80 and an effect size of .50, a sample size of 30 subjects was desirable for a .05 level of significance. However, although the study did not have enough power due to the smaller sample size, the data resulted in supportive information that positively informed of the need for self-care intervention as a stress reduction approach (see Tables 6-10).

The small sample size restricts the generalization of this study; hence, similar studies should be conducted with larger samples to ascertain whether similar data patterns would emerge. Another limitation is that some participants may have misinterpreted the instructions; while they were required to complete only one activity per day, some did more than one, as evidenced by the large number of times several activities were performed (see Tables 6, 7, and 9).

Dissemination Plan

A PowerPoint presentation of the results of the study and recommendations was sent out to managers of psychiatric departments across the Midwest. The purpose was to help managers understand the impact of job-related stressors on their nurses and the need to introduce measures such as self-care activities to help minimize job stress. They were also instructed to share the PowerPoint with their nursing staff. Initially, the project manager had planned to give the study results only upon the participants' request. However, due to the small sample size, all participants were given the PowerPoint

presentation with summary findings and the recommendations. This project will also be published in ProQuest to expand the reach of the information and have a broader impact on the health and wellness of nurses. The project manager also plans to write an article for publication in the journal of the American Psychiatric Nurses Association and/or the ANA.

Recommendations

Six recommendations arise from this investigation:

1. This study should be replicated with larger samples of psychiatric nurses with similar stress characteristics so the results can become generalizable. It is believed that as nurses become less stressed, their patient-care delivery will be affected positively.
2. Because the findings of this project revealed that psychiatric nurses could benefit from taking care of themselves, self-care activities could be added to the professional job description of psychiatric nurses to trigger awareness and sustainability.
3. Self-care activities could be added as a unit of study in nursing program curricula across the nation. The primary focus of the curricula in most nursing programs is on patient care, but given the ANA priority of self-care among nurses, this inclusion would be a positive change.
4. Nursing managers should assess the workplace for stress triggers and make the necessary adjustments to the workplace environment, work processes, workloads, or work designs to improve psychiatric nurses' feelings of well-being and ability to cope during work hours.

5. The OSPN INC has been successful in capturing the detailed data required for this study in each domain, so its use is recommended for future studies of a similar nature. The PSS was useful for capturing participants' feelings about the impact of the work environment on them; it could be utilized again to answer similar questions.
6. In similar investigations, the restrictions on the number of activities should be removed by allowing participants to do at least one activity per day because most voluntarily performed more than one per day, and most of them reported that they enjoyed the activities.

Use of the DNP Essentials

The undertaking of this project addressed the Doctor of Nursing Practice Essentials. Seven of the eight Essentials were utilized (I, II. III, IV, VI, VII, and VIII). The essentials are the foundational competencies necessary for the role of advanced practice (AACN, 2006).

Essential I: Scientific Underpinnings for Practice

A spirit of inquiry led the project manager to develop the burning PICOT question for this project. The project manager searched existing literature for evidence-based research to inform the project. The evidence was appraised for validity and usefulness. These scientific studies demonstrated an evidence gap and formed the basis for developing interventions that would benefit psychiatric nurses and patient care.

Essential II: Organizational and Systems Leadership for Quality Improvement and Systems Thinking

This essential helped the project manager to be consciously aware of the relationship between the organization's systems and their potential impact on nurses' health and how to take leadership in effecting change. Consequently, it informed my use of instruments that provided data on the impact of workplace dynamics on nurse stress levels via the PSS. The OSPN INC instrument documented the nurses' self-care. The ongoing high-stress levels among nurses, aggravated and compounded by the COVID-19 pandemic, made this project very timely. The aim was to increase nurse accountability for their self-care and improve the quality of care to the patient population they serve. As a nursing leader and change agent, the project manager initiated changes to promote stress reduction in the workplace through feasible, low-cost, and easy self-care activities through a six-week intervention program.

Essential III: Clinical Scholarly and Analytical Methods for Evidence-Based Practice

As a nurse working in the psychiatric department, the project manager observed there were significant physical and psychological challenges for nurses resulting from working with the mentally-ill population. This led to an interest in the topic of the project and the consequent literature review. Guided by this essential, the project manager was able to design, collect, and analyze relevant data, including a chi-square distribution, a *t*-test, correlational tests, and other descriptive tests that provided responses to the PICOT question.

Essential IV: Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Healthcare

The undertaking of this project was achieved through the utilization of several methods of information technology. One means of recruitment was through online organizations. Delivery of the intervention was done via PowerPoint. Class Climate provided the main avenue by which data were collected, and data analysis was done through SPSS.

Essential VI: Interprofessional Collaboration for Improving Patient and Population Health Outcomes

The outcome of this project was made possible by the expertise and input of committee members. Team members on this project consisted of the project chair, another DNP prepared psychiatric nurse, a Ph.D. with expertise in research who served as the methodologist, and a statistician. Together they provided the necessary research rigor, guidance, and analysis that helped in the completion of the project.

Essential VII: Clinical Prevention and Population Health for Improving the Nation's Health

With an estimate of almost 4 million nurses in the U.S, nurses comprise the largest workforce within the healthcare delivery system. Nurses are crucial for delivering care and influencing population health (AACN, 2022; ANA, 2021b; Mahdavi et al., 2021). In this project, great emphasis was placed on improving the physical, mental, and spiritual health of nurses by exposing them to self-care activities. The intention was to reduce occupational stress levels and, thereby, improve patient care, longevity in the job, and the overall health of the nation.

Essential VIII: Advanced Nursing Practice

This essential serves as the capstone of all the essentials. As an advanced practice nurse, the project manager was able to demonstrate advanced levels of thinking and synthesis in incorporating the theories and best practices that were attained throughout the program and to utilize them in the development and delivery of this project. The outcomes of this project stand to benefit the practice of psychiatric nursing care in the institutions where adopted.

Project Evaluation

Participants were asked to evaluate the project by responding to four questions via Class Climate to maintain anonymity. They were asked to rate the self-care activities on a scale of 1 (*poor*) to 5 (*excellent*). “Excellent” was chosen by 71.4%; 14.3% said they were “very good”; another 14.3% responded with “good.” They were asked next if they would recommend the activities to other nurses as a stress reduction program; 100% stated they would. The next question followed up on the previous one, enquiring why they would or would not recommend the stress reduction program. Their main response was that self-care activities are useful stress reduction measures, and nurses could benefit from them. The fourth question asked them to provide suggestions for changes to the intervention program. Most responded that they would not make any changes. However, one suggested that an option should have been given to document more than one activity in a day. Another suggestion was that more time should have been given for the journal entry. However, one week response time was chosen to capture respondents' feedback while it was still fresh in their minds.

Plans for Sustaining Self-Care Recommendation

To reinforce habitual practice of self-care among nurses, the project manager designed a nursing pledge and dispersed it to all study participants. The pledge was also given to managers in psychiatric settings to share with their nursing staff. The pledge contains the ANA mandate (Lachman, 2015) as a reminder of the duty nurses have to self. Within the pledge, the nurse must commit daily to engage in activities that will benefit body, mind, and/or spirit (Appendix K). They were instructed to download the pledge, sign, and place it in a strategic location where they can see it every day. It is hoped that by repeating the pledge daily, nurses will develop a sense of loyalty to self and will make self-care a priority in their life.

Spiritual Application

The Creator of humankind, who knows best, recognized the need for humanity to maintain a balance between the mind, body, and spirit when He invited us to find our rest in Him. The words "Come unto me, all ye that labour and are heavy laden, and I will give you rest" (King James Version, 2022, Matt 11:28) still ring through the annals of time. This command teaches us the importance of meeting our self-care needs before we can take care of others adequately. Therefore, when adopted, the findings of this project will have a positive impact on the restoration and rejuvenation of the whole person of nurses.

APPENDICES

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 checking how often you felt or thought a certain way.

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

Scoring of the PSS Test

Four of the items (4, 5, 7 and 8) were stated positively with respect to one's coping ability and were reversed scored before calculations were performed on the data (i.e. 0 = 4, 1 = 3, 2 = 2, 3 = 1 and 4 = 0). Total scores on the PSS ranged from 0 to 40 with the higher scores indicating higher perceived stress. Following are the three categories of stress and their corresponding score ranges:

- Low stress (0 – 13)
- Moderate stress (14 – 26)
- High perceived stress (27 – 40)

First, reverse your scores for questions 4, 5, 7, and 8. On these 4 questions, change the scores like this: 0 = 4, 1 = 3, 2 = 2, 3 = 1, 4 = 0.

Now add up your scores for each item to get a total.

APPENDIX B

PERMISSION TO USE PSS

PERMISSION FOR USE OF THE PERCEIVED STRESS SCALE

I apologize for this automated reply. Thank you for your interest in our work.

PERMISSION FOR USE BY STUDENTS AND NONPROFIT ORGANIZATIONS: If you are a student, a teacher, or are otherwise using the Perceived Stress Scale (PSS) without making a profit on its use, you have my permission to use the PSS in your work. Note that this is the only approval letter you will get. I will not be sending a follow-up letter or email specifically authorizing you (by name) to use the scale.

PERMISSION "FOR PROFIT" USE: If you wish to use the PSS for a purpose other than teaching or not for profit research, or you plan on charging clients for use of the scale, you will need to see the next page: "Instructions for permission for profit related use of the Perceived Stress Scale".

QUESTIONS ABOUT THE SCALE: Information concerning the PSS can be found at https://www.cmu.edu/dietrich/psychology/stress-immunity-disease-lab/index.html (**click on scales on the front page)**. Questions about reliability, validity, norms, and other aspects of psychometric properties can be answered there. The website also contains information about administration and scoring procedures for the scales. Please do not ask for a manual. There is no manual. Read the articles on the website for the information that you need.

TRANSLATIONS: The website (see URL above) also includes copies of translations of the PSS into multiple languages. These translations were done *by other investigators*, not by our lab, and we take no responsibility for their psychometric properties. If you translate the scale and would like to have the translation posted on our website, please send us a copy of the scale with information regarding its validation, and references to relevant publications. If resources are available to us, we will do our best to post it so others may access it.

Good luck with your work.

Sheldon Cohen
Robert E. Doherty University Professor of Psychology
Department of Psychology
Baker Hall 335-D
Carnegie Mellon University
Pittsburgh, PA 15213

APPENDIX C

OCCUPATIONAL STRESS IN PSYCHIATRIC NURSES AND THE IMPACT OF SELF-CARE

(OSPN INC Questionnaire)

DAILY LOG: For Each Week

Insert Code _____

Check the following: M/F Age: 18-29, 30-39, 40-49, 50-59, 60+

Setting: Acute or Outpatient

	Day 1	**Day 2**	**Day 3**	**Day 4**	**Reflection/Comments:** You may also add a comment or reflection.
After participating in one or more of these activities say how you feel using the following scale: 1 = still stressed; 2 = less stressed; 3 = relieved/lighter in spirit; 4 = feeling upbeat; 5 = ready to cope with my day.					
Spiritual					
Devotional reading					
Prayed					
Other:					
Physical					
Walking					
Jogging					
Yoga					
Other:					
Mental Activities					
Motivational reading					
Journaling					
Gratitude journaling					
Meditate/reflect on positive things in life					
Listened to uplifting or relaxing music					

Thank you for participating!

APPENDIX D

IRB APPROVAL

Andrews University
Office of Research & Creative Scholarship

February 8, 2022

Jacqueline Lowe
Tel.269-240-7639
Email: jalowe@sbcglobal.net

RE: APPLICATION FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS
IRB Protocol #:21-145 **Application Type:** Original **Dept.:** Nursing
Review Category: Exempt **Action Taken**: Approved **Advisor:** Carol Rossman
Title: Occupational stress in psychiatric nurses and impact of self-care activities.

Your IRB application for approval of research involving human subjects entitled: "*Occupational stress in psychiatric nurses and impact of self-care activities*" IRB protocol # 21-145 has been evaluated and determined Exempt from IRB review under regulation CFR 46.104 (3)(i): Research involving benign behavioral interventions with the collection of information from adult subject throuch verbal or written responses or audiovisual recording if the subject prospectively afrees to the intervention, and in which information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subject. You may now proceed with your research.

Please note that any future changes made to the study design and/or informed consent form require prior approval from the IRB before such changes can be implemented. Incase you need to make changes please use the attached report form.

While there appears to be no more than minimum risks with your study, should an incidence occur that results in a research-related adverse reaction and/or physical injury, this must be reported immediately in writing to the IRB. Any research-related physical injury must also be reported immediately to the University Physician, Dr. Katherine, by calling (269) 473-2222.

We ask that you reference the protocol number in any future correspondence regarding this study for easy retrieval of information.

Best wishes in your research.

Sincerely,

Mordekai Ongo, PhD.
Research Integrity and Compliance Officer

Institutional Review Board – 8488 E Campus Circle Dr Room 234 - Berrien Springs, MI 49104-0355
Tel: (269) 471-6361 E-mail: irb@andrews.edu

APPENDIX E

IMPLIED INFORMED CONSENT TO PARTICIPATE IN A RESEARCH PROJECT

Project Title: Occupational Stress in Psychiatric Nurses and the impact of Self-care Activities

Dear Participant:

You are being asked to participate in a scholarly project being conducted in the Doctor of Nursing Practice program at Andrews University, Michigan. This quality improvement project focuses on the presence of occupational stressors among Psychiatric nurses and the impact that intentional self-care activities may have in reducing such stress. This project is geared towards staff nurses only. If you agree to participate, on Monday, February 28, you will be sent a link via your email in order to respond to a questionnaire known as the Perceived Stress Scale (PSS), which will serve as a pretest, to measure the level of stress you experience at work. You will then be asked to participate in a self-care intervention program over a period of 4 days per week, 20 minutes per day, for six (6) weeks that aims to reduce stress and restore the balance of mind, body and spirit. At the end of the six (6) weeks, you will repeat the questionnaire that scores your stress level (PSS posttest).

Procedures, Risk, Confidentiality and Benefits

Your participation is completely voluntary. Your involvement consists of completing the initial PSS questionnaire and demographic data sheet which should take less than 30 minutes of your time. Your completion of the questionnaire will be your consent to participate in the study. Once you have decided to participate, you will be asked to complete a daily log also called the Occupational Stress in Psychiatric Nurses and the Impact of Self-Care Questionnaire (OSPN INC) to show the impact of the daily activities on your stress level. Your confidentiality will be assured by not asking you to include your name at any time during the study. You will also be assigned a code. The link for the survey will be sent only to you, and you will be asked not to forward the link to anyone else. Your email address will be used only for the sole purpose of this project

and will not be shared with anyone else. Furthermore, your response will not be shared with your management or any organizations and will not be used for any marketing purposes. Your response will be kept in a password protected computer and will be destroyed after five years.

There are no known risks associated with participating in this study. At end of the study, you will be asked to complete a posttest (PSS) within three (3) days and receive a

$10 gift card from Amazon for participating in the study. You will also be sent the results of the study via PowerPoint upon request. You will be able to withdraw from the project at any time. Your participation, however, will be very beneficial in advancing knowledge in the area of occupational stress experienced by psychiatric nurses and the benefit of intentional self-care. Only a limited number of studies have been completed in this area within the US. Thank you very much for your participation in the study.

Project Manager:
Jacqueline Lowe, RN
Doctor of Nursing Practice Student
Andrews University
Cell: 269-240-7639
Email: veronicalo@att.net

Project Faculty Chairperson:
Carol Rossman, DNP, APRN-BC
Professor of Nursing/ Family & Pediatric Nurse Practitioner
Director of DNP Program, School of Nursing
Andrews University, Berrien Springs, MI
rossman@andrews.edu

Andrews University Institutional Review Board
269-471-6361 irb@andrews.edu

APPENDIX F

RECRUITMENT FLYER

APPENDIX G

DEMOGRAPHIC DATA SHEET

Instructions: Please check the responses below that best apply to you

1. Sex: (1) male (2) female

2. Age: 1) 18-28 yrs. 2) 29-39 yrs. 3) 40-50 yrs. 4) 51-61yrs. 5) 62 and older

3. Years of Experience in Psychiatric Nursing: 1) 1-5 yrs. 2) 6-11 yrs. 3) 12-17 yrs. (4) 18- 23 yrs. 5) 24 yrs. and above

4. Setting: (1) acute ___ (2) outpatient___

5. Qualifications: (1) ADN _____ (2) BSN _____ (3) Masters _____ (4) Doctorate _____

6. Marital status: (1) single ____(3) divorced _____(4) widowed (2) married _____(5) other _____

7. I am (check only one group)

   (1) Asian or Asian American

   (2) Black or Afro-American

   (3) Latino or Hispanic American

   (4) Native American

   (5) White, Caucasian

   (6) other, (please specify_____

APPENDIX H

DEMOGRAPHIC CODES FOR SAMPLE

Variable Labels	**Levels of the Variable**	**Scale of Measurement**
Sex	1 = Male 2 = Female 3 = Other	Nominal or Categorical
Age	1 = 18 – 29 2 = 30 – 39 3 = 40 – 49 4 = 50 – 59 5 = 60+	Categorical
Years of Experience	1 = 1 – 5 2 = 6 – 11 3 = 12 – 17 4 = 18 – 23 5 = 24+	Nominal or Categorical
Qualifications	1 = A.D.N. 2 = BS 3 = Masters 4 = Doctorate	Nominal or Categorical
Setting	Acute care Outpatient care	Nominal or Categorical
Marital Status	1 = Single 2 = Married 3 = Divorced 4 = Widowed 5 = Other	Nominal or categorical
Ethnicity	1 = Asian/Asian American 2 = Black/Afro American 3 = Latino/Hispanic American 4 = Native American Indian 5 = White/Caucasian 6= Other	Nominal or categorical

APPENDIX I

BASELINE DATA TABLE FOR PSS

Item	PSS Item	N	Range	Mean	SD
1.	In the last month, how often have you been upset because of something that happened unexpectedly?				
2.	In the last month, how often have you felt that you were unable to control the important things in your life at work?				
3.	In the last month, how often have you felt nervous and "stressed" at work?				
4.	In the last month, how often have you felt confident about your ability to handle your personal problems at work?				
5.	In the last month, how often have you felt that things were going your way at work?				
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?				
7.	In the last month, how often have you been able to control irritations in your life at work?				
8.	In the last month, how often have you felt that you were on top of things at work?				
9.	In the last month, how often have you been angered because of things that were outside of your control at work?				
10.	In the last month, how often have you felt difficulties were piling up so high that you could not overcome them at work?				

APPENDIX J

SUMMARY OF RESPONSES TO OSPN INC

The activities of each scale were analyzed for the number of respondents to each activity; the most frequent response chosen by the respondents on the scale was shown (i.e., where *1=still stressed, 2= less stressed, 3= relieved/lighter in spirit, 4=feeling upbeat, 5-ready to cope with my day)*. Respondents were given the opportunity to comment/reflect on the impact of each activity on their stress levels. Where such comments have been added, they were analyzed using a thematic approach. In this approach, the entire range of comments were sorted, collated, and analyzed to ascertain whether there were patterns or recurring themes in the responses which were then presented.

Table 1

Results of Self-Care Intervention: Mental Dimension

Self-care Dimension	**Using the following scale (where 1 = still stressed, 2 = less stressed, 3 = relieved/lighter in spirit, 4 = feeling upbeat, 5 = ready to cope with my day) the most frequent response option is shown below.**														
	Week 1		**Week 2**		**Week 3**		**Week 4**		**Week 5**		**Week 6**		**Cumulative Frequency for six-week intervention**		
Mental	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**% Mode**
Motivational reading	24	5	6	2, 3,	10	1, 2	8	3	8	3	10	2, 3	66	2 & 3	33.3 & 44% resp.
Journaling	9	1	7	3, 5	2	5	5	2, 5	4	5	0	N/A	27	5	57%
Gratitude Journaling	8	1, 5	3	3	0	N/A	2	2	2	2	3	2, 4, 5	18	2 & 5	37.5 % & 40.0%
Meditate/reflect on positive things in life	28	4	6	3, 4	7	1, 3	7	4	7	4	6	2, 5	61	3 & 4	33.3 & 44% resp.
Listened to uplifting or relaxing music	32	5	15	3	11	4	7	4	7	4	6	3, 4	78	4	57%
Total participants	**16**		**13**		**12**		**14**		**14**		**11**				
Cumulative Frequency													250		

Note: N = number of activities completed; F = mode.

Table 2

Results of Self-care Intervention: Physical Dimension

Self- care Dimension	**Using the following scale (where 1 = still stressed, 2 = less stressed, 3 = relieved/lighter in spirit, 4 = feeling upbeat, 5 = ready to cope with my day) the most frequent response option is shown below.**														
	Week 1		**Week 2**		**Week 3**		**Week 4**		**Week 5**		**Week 6**		**Cumulative Frequency for six-week intervention**		
Physical	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**% Mode**
Walking	38	4	28	4	20	2, 5	23	4	23	4	28	4	160	4	71.4%
Jogging	13	5	6	4, 5	5	5	4	5	4	5	9	5	41	5	85.7%
Yoga	12	1, 5	5	3	4	5	3	5	3	5	4	5	31	5	71.4%
Other:	22	2, 3, 5	8	2	17	4	10	5	10	5	8	4	75	2, 4, & 5	.25%, 25% & 37.5%.
Total (# of participants)	**17**		**18**		**20**		**16**		**16**		**21**				
Cumulative Frequency (activities)													307		

Note: N = number of activities completed; F = mode.

Table 3:

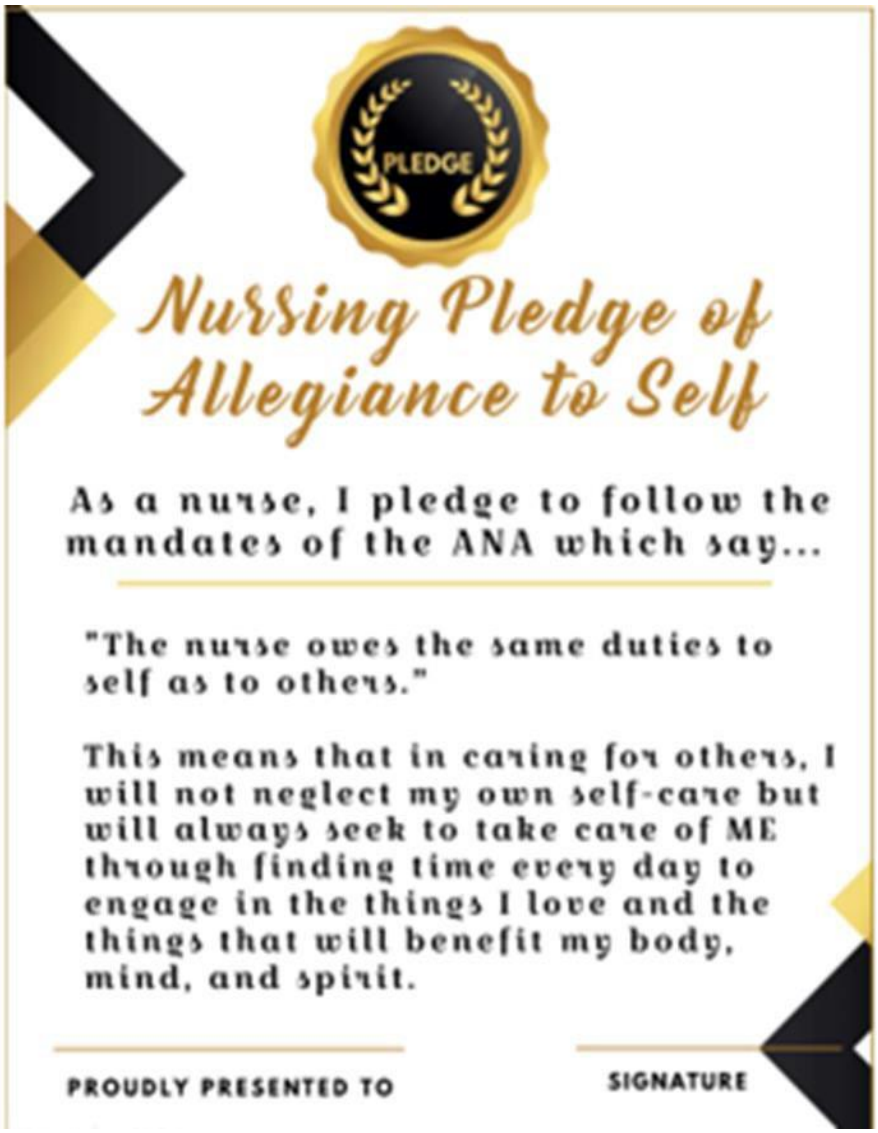
Results of Self-care Intervention: Spiritual Dimension

Self- care Dimension	**Using the following scale (where 1 = still stressed, 2 = less stressed, 3 = relieved/lighter in spirit, 4 = feeling upbeat, 5 = ready to cope with my day) the most frequent response option will be shown below.**														
	Week 1		**Week 2**		**Week 3**		**Week 4**		**Week 5**		**Week 6**		**Number of activities for six-week intervention & modal response**		
Spiritual	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**% Mode**
Devotional reading	35	3	16	3, 5	16	5	19	5	19	5	14	5	119	5	71.4%
Prayed	42	5	19	5	17	3, 5	19	5	19	5	19	5	135	5	85.7%
Other:	16	3	5	4, 5	7	3, 4, 5	14	3	3	4	1	4	46	3 & 4	33.3 & 55.5%
Total (# of participants)	**17**		**13**		**13**		**14**		**14**		**14**				
Cumulative Frequency													300		

Note: N = number of activities completed; F = mode.

APPENDIX K

PLEDGE FOR SUSTAINING SELF-CARE ACTIVITIES



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