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Implementing Mindfulness Meditation to Reduce Nurse Burnout

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This doctoral project, directed and approved by the candidate's committee, has been accepted by the College of Graduate and Professional Studies of Abilene Christian University in partial fulfillment of the requirements for the degree

Doctor of Nursing Practice

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by

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Abstract

There will be an estimated shortage of 100,000 nurses by the year 2022, with 500,000 seasoned nurses retiring. The nursing profession has recently experienced a devastating pandemic that left no time to combat the detrimental effects of burnout, specifically for intensive care nurses, who are the frontline workers of a physically and psychologically draining working environment conducive to burnout. Nurses experience burnout for a mixture of reasons, but mainly it is due to the lack of interventions to help them combat the disease. Mindfulness meditation represents an interventional tool that has been shown to reduce the negative stressors associated with burnout and decrease the effects of outside factors that lead to burnout. Mindfulness meditation can be a valuable tool to help intensive care nurses recognize and decrease their burnout. The purpose of this project was to educate intensive care nurses on burnout, identify and understand their areas of burnout through a survey, and offer a tool they can use to combat this never-ending problem. Results showed emotional scores improved from 29.87 to 19.55, depersonalization scores improved from 11.35 to 8.16, and personal accomplishment scores improved from 31.55 to 36.52. With the results showing a decrease in all three components of burnout, it is evident that the intervention was successful, and mindful meditation should be used to combat burnout in more medical establishments.

Keywords: nurse, burnout, nurse burnout, mindfulness meditation

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Chapter 1: Introduction

Historically, hospital leaders have struggled with inadequate staffing, poor mental health management for staff, and unforeseen stressors that contribute to burnout as they attempt to maintain a safe working environment. Because the nursing profession is in a shortage, patients have suffered as a result of failed attempts to improve working conditions, resulting in high turnover rates in the nursing field. In the next 5 years, there will be a severe nursing shortage, partially because of anxiety, sleep deprivation, fatigue, and burnout (Brown et al., 2018). Nurse burnout has been recognized by the World Health Organization (WHO) as a disease and occupational phenomenon (Kumar, 2019). Because of the silent epidemic of nurse burnout, 43% of hospital nurses are currently suffering from burnout, with 33% providing bedside care (Reith, 2018). One study showed a need for prevention and intervention to decrease burnout because this can improve the quality of care for nurses and patients (Russell, 2016). Nurse burnout is often a result of stressful situations or interventions that have proven non-effective (Jacobs et al., 2017).

The aim of this project was to demonstrate the influence of an 8-week mindfulness meditation course offered to intensive care nurses who worked at a large suburban hospital. Various measures were implemented to explore whether or not intensive care nurses can use mindful meditation to decrease burnout symptoms. These interventions were created by breaking down the disease, research, literature review, theoretical framework, implementations of interventions, and the use of a survey that helped identify nurses who were experiencing burnout. This helped plan out and determine whether or not intensive care nurses could decrease their burnout through mindfulness meditation.

Problem

An important phenomenon experienced in the medical field today, specifically within intensive care units, is nurse burnout. According to Fitzpatrick et al. (2019), there have been few to no interventions for nurses currently experiencing the symptoms of burnout, and leaders of healthcare agencies are seeking ways to intervene against this issue. Due to the limited interventional courses currently offered to nurses experiencing burnout, nurses need to self-monitor and show initiative to gather resources to improve their psychological and physiological well-being.

In order to minimize nurse burnout, nurses must learn to utilize evidence-based practices and interventions that decrease burnout and apply the new skills to help them cope and decrease unwanted stressors to increase positivity at work (Waddill-Goad, 2016). However, if nurses are unable to self-adapt to a stressful environment, this can lead to workplace stress that affects job satisfaction, increases turnover, increases financial loss, and reduces the quality of patient care (Mealer et al., 2017). The breakdown of nurses, both physically and mentally, can lead to a multitude of destructive consequences. Poor adaptation and a lack of resources can lead to the deterioration of nurses battling a stressful work environment. Through the implementation of new skills taught through the process of this project intervention, nurses can equip themselves with techniques and skills to provide better service to their patients due to their gained knowledge of mindfulness meditation.

Mindfulness meditation has been found to decrease stress in nurses' burnout—both physiological and psychological—and stressful situations (Jacobs et al., 2017). Jacobs et al. (2017) suggested that when components of mindfulness meditation are used by intensive care nurses, they can cope with stressful situations; as a result, mindfulness meditation should help

decrease burnout symptoms. With mindfulness meditation and the nurse's will to make change, nurses can utilize the interventional tool to better their well-being.

Background

Burnout

Burnout syndrome has been around since 1974 when Herbert Freudenberger, an American psychologist, identified it as a consequence of extreme stress related to professions that are in constant demand in assisting others (Eisenstein, 2018). Freudenberger studied the correlation between burnout syndrome and employees in customer service and found that burnout increased when external hostile factors were more prominent compared to support systems (Eisenstein, 2018). According to a study conducted by Molina-Praena et al. (2018), it was evident that doctors and nurses are affected by burnout in a significant percentage compared to other professions. Physicians and nurses are the majority of medical staff that intervene on patients' behalf; thus, it is extremely vital to intervene and be proactive rather than reactive before burnout causes multiple negative chain reactions.

Burnout syndrome results from workplace stress that can lead to a multitude of poor outcomes when not appropriately addressed or managed (Kumar, 2019). Burnout can affect multiple functions of an individual—from physical and psychological states to job performance. Molina-Praena et al. (2018) offered an additional critical point on the dysfunction of emotional exhaustion, high depersonalization, and inadequate personal accomplishment. If this syndrome is not adequately managed or addressed in the medical field, the outcome can include a variety of negative consequences.

Contemporary Factors

Because of contemporary issues such as infectious diseases and overwhelming unknown factors, like the Coronavirus 2019 pandemic, Coronavirus SARS-COV2 (COVID-19), burnout symptoms are on the rise. If burnout symptoms are left untreated, nurse burnout can lead to an increase in nurse turnover and psychological decline, as well as negative patient care outcomes (Bong, 2019). Nurses confront both internal and external factors that affect their internal coping mechanisms. In relation to the negative outcomes of burnout, more effective interventions need to be implemented to battle the psychological and physiological deterioration of nurses.

Project Negative Outcomes

The focus of this project was to use mindfulness meditation to help decrease burnout among intensive care nurses. When interventions are not implemented to improve the care of nurses, hospital establishments can suffer negative effects. Registered nurses are the ones who implement physician orders, assess and monitor patients, educate patients, and ultimately discharge patients to their homes with appropriate follow-up care when needed (American Nurses Association, 2017). Registered nurses make up the bulk of medical professionals, making them a critical component of the healthcare system (Bakhamis et al., 2019). When nurses are impeded in functioning correctly and professionally due to nurse burnout, this results in poor patient care, the decline of effective interventions, and the decline of morale and efficiency. Thus, with internal challenges due to inadequacy, nurses with symptoms of nurse burnout are affected in terms of how they address the daily demands of their jobs competently and are unable to collaborate with patients or colleagues (Bakhamis et al., 2019). It has been shown that nurse burnout is the result of multiple tier stressors that are detrimental. Another example of the effects of burnout on the hospital establishment is that nurses suffering from the disease are unable to

deliver maximum patient care, which increases safety issues and decreases staff cohesiveness (Bakhamis et al., 2019).

External Restrictions

Nurse burnout needs to be explored and analyzed to proactively and properly identify the symptoms of nurse burnout. It is essential to intervene in a timely manner to decrease the deterioration of effective nurse inputs.

Purpose

The purpose of this Doctor of Nursing Practice (DNP) project was primarily to establish and implement mindfulness meditation in an attempt to decrease burnout in intensive care nurses working at a suburban medical center in Southern California. This project emphasized the need to be prospective on the approach rather than retrospective. With the educational longevity intervention, the nurse participants in a cohort group took an 8-week interventional session and utilized mindfulness meditation to improve their individual burnout symptoms. The cohort group involved a total of 32 nurses, 11-night shift and 21-day shift, who used the 8-week course to help decrease their burnout symptoms. Although the study lacked longevity, the 8-week course was supported by a literature review and evidence-based practices to provide a strong foundation. The nurse participants worked in tandem with their peers to enhance their skills and maximize their cross-sectional understanding to improve as a whole. The nurse participants needed to be able to identify the triggers or the symptoms to immediately address and correct nurse burnout, which became evident during the statistical analysis presented in Chapter 4.

The study was conducted at a small suburban medical center in Southern California with a strong history of providing substantial care to the surrounding community. The medical center was recently bought out by a well-recognized organization that is known for education and

facilitating new policies and procedures. The hospital's educational program will increase the excellence and productive environment in order to implement a new intervention that will be used for the betterment of nurses. As an educational establishment, the hospital continues to address challenges through the use of research and educational interventions to improve the quality of care for patients and their staff members.

Significance of the Study

When an organization's staff members are provided with support and tools to build a plan to combat undesired matters, benefits include superior efficiency, happier employees, improved patient care, and increased job satisfaction (Fitzpatrick et al., 2019). Leaders of healthcare organizations have been seeking out ways to improve and establish a healthier work environment with patient safety in mind. Mindfulness meditation interventions have been shown to improve nurse outcomes (Fitzpatrick et al., 2019). With validity and commitment from the cohorts, the implementation of mindfulness meditation can lead to tremendous accomplishments.

Nurse burnout has contributed to the deterioration of registered nurses who work within healthcare establishments. A nurse's internal battle with burnout has been found to play a role in the quality of care provided to patients (Maslach & Leiter, 2008). This breakdown of registered nurses can cause a domino effect that will lead to poor patient care, high turnover, and a decrease in financial profits. For a better explanation, burnout can lead to poor health of the registered nurse, poor patient care, and an increase in hospital financial loss (Leineweber et al., 2014). Without educating nurses on how to identify, intervene, and help prevent nurse burnout, the results can be consequential. These connections can include increased financial loss, patient safety injuries, and poor physical and psychological health for the nurses. It is essential to implement change to ensure the nurses of today do not cease to be the nurses of tomorrow. Nurse

burnout is a serious silent medical epidemic that warrants further evaluation and interventions based on evidence-based practices and research.

Nature of Project

Research Design

This project's research design was aimed at educating a cohort group of 32 nurse participants on nurse burnout and the utilization of mindfulness meditation to combat the symptoms of burnout. The education initiative focused on educating healthcare workers on appropriate research-based steps to minimize human healthcare errors and maximize the highest level of care. By providing pertinent research-based material on burnout, this project supports the importance of the identification, intervention, and reduction of nurse burnout. It is imperative that change is brought within the nursing field in order to maintain an enthusiastic working environment that will provide patients with the highest level of nursing care. "Improvement of the work environment provides an opportunity to promote joy in the workplace. Interventions to improve the work environment of health care providers are consistent with the Healthy Work Environment standards of the American Association of Critical-Care Nurses" (Fitzpatrick et al., 2019, p. 185). This change within the working environment will begin with research. This research on mindfulness meditation was used to construct interventional material for nurses at risk or those who were already suffering from nurse burnout. Mindfulness meditation was used within the hospital setting to provide tangible research on whether or not this approach improved nurses' work ethic and decreased burnout.

The project was aimed at educating and facilitating resources to ensure that the nurse participants felt supported, valued, and had access to adequate resources. This implementation helped fill the gap within a hospital that currently had no protocol or intervention in place for

nurse burnout syndrome. Identifying, intervening with, and educating on nurse burnout is important to help reduce the effects of burnout (Vanajan et al., 2020). As is noted, nurses are in constant contact with patients, intervene on patients' behalf, and update physicians on the outcomes of treatments and possible recommendations to improve patient prognosis. The project in question helped bring awareness and educated the nurse participants on burnout prevention. By bringing awareness to nurse burnout, the hope was aimed at decreasing symptoms and maximizing adequate health care standards. It was also important to ensure access to adequate resources and provide a positive working environment. This project has the potential for being ground zero regarding new policies and procedures when dealing with nurse burnout.

Currently, nursing policies and interventions within the medical field are limited. Although there is research addressing nurse burnout, there are no current state policies that require hospitals to take a stand against this silent epidemic (Saint Martin et al., 2019). There are research-based articles that indicate nursing burnout should require an intervention immediately the moment it is identified, but hospital leaders continue to fail at intervening speedily. This problem is within the management's scope of practice to fix. From ratios to short staffing, a lot of significant fine detailing and tuning need to be conducted to address, recognize, and implement change to lessen nurse burnout.

Management

Throughout the project, personnel with given roles and responsibilities were those who were best fit to perform the tasks. The individuals who were included in the project were the stakeholders and team members. Stakeholders included the management, educational department, and even the nurses associated with the project because it affected them all. Management and participants were the responsible parties in ensuring the project flowed

smoothly, and all details of the process were addressed and completed. This was due to the fact that management had to provide consent for interventions, and participants had to complete the assigned tasks. Management was responsible for overseeing everything and ensuring all was done for the betterment and safety of the nurses; however, management's role ultimately went to me as the researcher because the COVID-19 pandemic limited management time. The educational department usually educates the staff about an issue and possible changes that need to occur within the workplace, but this role also went to me due to the COVID-19 pandemic. Nurses involved with the project were responsible for answering questionnaires, testing out and implementing components of mindfulness meditation, and completing a postquestionnaire that established project stability and outcomes. All the roles and obligations were discussed during the implementation of the project. To minimize misconceptions and ensure social distancing, constant communication was provided through text messaging and Zoom meetings.

Data Collection and Instrumentation

This project's implementation changes took place through the provision of effective alternatives based on the assessment and research provided to nurses to ensure every participant was given the right tools to use. The end result supplied the facility with essential data generated by intervention surveys and post surveys. The results were made public for all to observe and analyze. In addition, each nurse was provided with my contact information to remain up to date with the research, as well as an outlet to discuss the project findings.

Data Analysis

The goal percentage was set at 90%, yet acceptance was 80%. To ensure confidentiality, nurses' information was not shared with management. Also, specific detailed information about

patients was not included due to privacy laws in place by the California Board of Registered Nursing. Only the statistical, research and final results were made public.

Questions Guiding the Inquiry

The research question guiding the study was: Does an educational intervention of nurse burnout and mindfulness meditation practice reduce the burnout symptoms in intensive care nurses who adhere to an 8-week program that focused on identifying burnout symptoms?

The PICOT (population, intervention, comparison, outcome, and time) questions for the project were:

1. Do critical care nurses who work in a suburban medical center and engage in an 8-week course focused on mindfulness meditation show a change in their burnout scores?
2. Do the burnout scores of critical care nurses change after the educational intervention compared to their pretest scores before educational intervention?

The PICOT approach of this project was as follows: intensive care nurses (population), placed in a meditation course (intervention), will have decreased nurse burnout (outcome) after implementation of meditational methods (comparison) over an 8-week period (time).

Operational Definitions

Key terms that were used throughout this project are defined below.

Burnout syndrome. A product of built-up stress that is not adequately addressed, resulting in emotional exhaustion, depersonalization, and a decreased sense of personal accomplishment (Rodrigues et al., 2018).

Health promotion model (HPM). A model that emphasizes the importance of patient care as well as causative influences that can lead to undesirable behaviors. It has five key concepts of person, environment, nursing, health, and illness (Pender, 2011).

Intensive care. A specialty unit where patients require closer observation and need critical medical care (American Association of Critical-Care Nurses, 2020).

Maslach Burnout Inventory – Survey Human Services for Medical Professionals (MBI–SHS MP). An instrument that measures an individual's burnout through three different categories of emotional exhaustion, depersonalization, and personal accomplishments (de Beer & Bianchi, 2019).

Mindfulness meditation. A mindful awareness where individuals focus their attention on the present moment to increase psychological plasticity and shift attentiveness to various objectives in the present moment (Frögéli et al., 2019).

Nurse. An individual who has completed a program designed with generalized nursing knowledge and is then authorized by their state to practice under their license (American Nurses Association, 2020).

Stress. A physiological response of the human body to situations demanding a response to a threatening situation (Galdikiene et al., 2019).

Theoretical Framework

When a nurse becomes aware of and identifies a problem, they usually assess their findings using various factors. Typically, the solution is a nursing theory that is developed to improve nursing care and patient outcomes, as nurse theories are designed specifically for nurses. Burnout syndrome has been recognized as a chronic symptom that has characteristics of a loss cycle of daily job demands, daily exhaustion, and daily self-undermining (Bakker & Costa, 2014). Due to the recent acknowledgment of nurse burnout as a disease, theories have slowly developed to help correct this silent epidemic. Theories that assist in the denaturing of the

problem while contributing helpful methods in correcting said issues have shown the importance and benefit of intervention (Vanajan et al., 2020).

Description of Health Promotion Model

The health promotion model (HPM) was written and developed by Dr. Nola Pender (Pender, 2011). The method contains a focus on patient care as well as contributing factors that can lead to negative behaviors. It has five key concepts of person, environment, nursing, health, and illness (Pender, 2011). Pender created the HPM because she believed she could improve the quality of patients' lives by helping patients make changes to negative behaviors before they lead to unhealthy outcomes (Pender, 2011). The theory is based on correction rather than tertiary care.

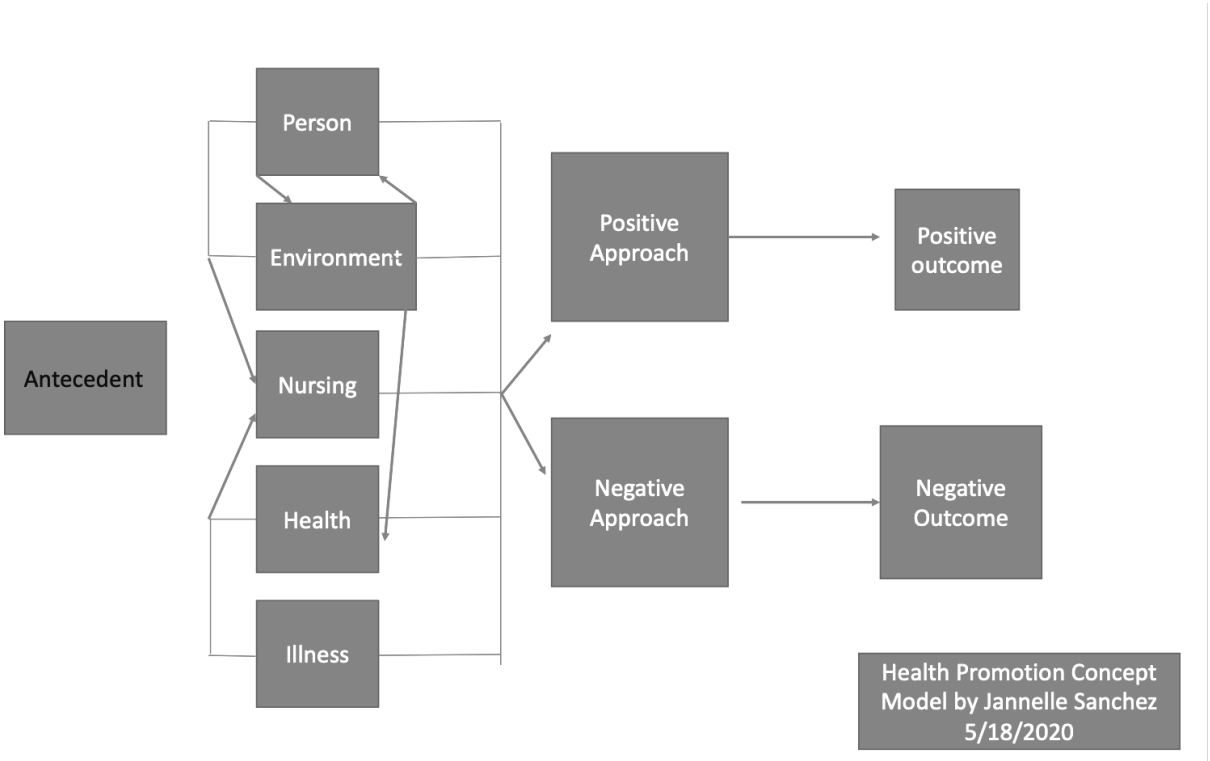
A person is the first concept and is the foundation of the theory (Pender, 2011). A person is the individual responsible for the outcomes of their productivity as well as the responsible party for the remainder of the concepts. Pender asserted that an individual is affected by their environment and these environmental factors influence the way the person conducts themselves (Pender, 2011). The environment is the vicinity where individuals interact socially and practice their beliefs and cultures, as well as the physical setting where their life unfolds (Pender, 2011). This environment concept can be molded by the person to whom the theory applies. Both the person and environment affect nursing care. Nursing care is conducted by the nurse who is responsible for the patient. This care can be affected by the person, environment, health, and illness.

Another concept is health. The health of the individual can be altered by positive or harmful behavior. This concept relies heavily on the environment in which the individual is placed. The health of the individual can be conditioned and targeted in a particular way through education and adjustments made to better themselves (Pender, 2011). Last, illness is another

concept within the model. This concept is influenced by the individual being able to alter obstacles in their life to better themselves. All concepts within the model can be used not only for patients but also for nurses. The concept model (Figure 1) shows the correlations among the five concepts within Pender's (2011) HPM. The antecedent can lead to the five factors that can alter the positive or negative approach and lead to a productive or nonproductive outcome.

Figure 1

Concept Model of Nola Pender's HPM



Utilization of Theory

The HPM was used for the correction and educational intervention of nurse burnout. Although the theory is well equipped and fully capable of supporting the problem of interest, an instrument was also used to validate both the problem of interest and theory. The HPM is

connected to the study through the importance of nurses understanding and being aware of their surroundings. When nurses are aware of their surroundings and potential triggering factors of nurse burnout, they are better equipped to respond appropriately.

Assumptions

The assumptions brought up by the research and theory were the following:

- Nurses participating in the mindfulness meditation intervention were a strong representation of the nurses within the intensive care unit in a suburban medical center.
- Nurses participating in the mindfulness meditation intervention answered the pretest questionnaires truthfully.
- Nurses participating in the mindfulness meditation intervention utilized the new knowledge and applied it during the full 8-week course.
- Nurses' burnout scores would improve after the implementation and show a decrease in burnout.

Limitations

The project was focused on an 8-week mindfulness intervention for nurses within the intensive care unit, and the participants were also volunteers. The project was not randomized, as nurses selected for the project were asked on a volunteer basis only. The number of participants, the use of a single site, and the lack of randomization were some limitations, but the most significant limitation was an unforeseen one.

COVID-19 limited the exposure time and face-to-face interventions between participants and me. The pandemic also set strict rules upon me to carry out the project in a timely manner. This limitation was worked around by utilizing online meetings, emails, and text messages.

Chapter Summary

This chapter provided an overview of burnout and the importance of intervening when symptoms are identified. The problem was also discussed and broken down for a better understanding. Nurse burnout was broken down in detail with background information to provide a better understanding of what the disease means and what damaging results it can cause. The purpose of the project was also discussed as well as the significance of the study and nature of the project. Research questions were also provided to show what guided the project, along with a PICOT question. A theoretical framework was introduced and broken down for better understanding. The theoretical framework offered a basis for the project and served as cohesive material for the intervention. Definitions and keywords were also given to ensure the meanings were not misinterpreted and were clearly defined for better understanding. Assumptions and limitations helped conclude the chapter because they give insight into possibilities that were assumed to arise during the implementation phase of the project. Through a breakdown of the disease, research, literature review, theoretical framework, implementations of interventions, and the use of a survey to identify nurses who had burnout, this project was designed to indicate whether or not intensive care unit nurse participants can decrease their burnout through mindfulness meditation.

Chapter 2 provides a literature review related to burnout as well as symptoms that arise from the disease and mindfulness meditation as an interventional outlet. The literature review provides evidence as to why intervention against burnout is important and how mindfulness meditation can help correct this problem.

Chapter 2: Literature Review

Literature Search Methods

This literature review is the essence of published articles related to nurse burnout and the correlation of meditation approaches to help combat this newly recognized disease and silent epidemic. The literature review covers the historical background of nurse burnout, the negative impact of the disease, and how meditation can be used to improve nurse burnout. This literature review was completed using the electronic database of Abilene Christian University Brown Library and Google Scholar. The search terms used were *meditation for burnout OR nurse OR negative outcomes of burnout AND nurse* from the years 2016–2020, with over 100 sources found and 94 used.

Inclusion filters were (a) meditation for burnout, (b) peer-reviewed, (c) research scholarly article, (d) geographic location: the United States, (e) English language, (f) negative outcomes of burnout, and (g) nurse. A 4-year publication time period (i.e., 2016–2020) was chosen to provide evidence on how psychological intervention can help decrease burnout. Also included was one article published in 1975 and three articles published between 2001–2011.

In the first step, 97 articles were identified and collected from two databases (Abilene Christian University Brown Library, $n = 45$; Google Scholar, $n = 49$) from a review of titles only. Of these, 17 articles were found to be from invalid sources and were therefore excluded to make a total of 77 articles. A review of articles specific to nurses or burnout events happening in a hospital was conducted. No duplicate articles pertaining to nurse burnout, staff turnover, mindfulness meditation, patient outcomes, and history of burnout were noted, resulting in the final number of 94 articles (Abilene Christian University Brown Library, $n = 45$; Google Scholar, $n = 49$).

Historical Overview

When it comes to medical facilities, the main goal of any medical professional is to place their patients' needs before their own. Because of their sacrifice on a daily basis, this has led to what is now known as burnout. Burnout was a term coined back in the 1970s by a psychologist named Herbert Freudenberger, who believed that the contributing factors to burnout revolved around self-help groups and individuals who have worked in an establishment that serves others for more than 1 year (Freudenberger, 1975). This is where the beginnings of burnout research began to manifest. Freudenberger also discovered that the types of individuals who suffer from burnout exhibit common symptoms related to burnout, and these symptoms result in the psychological deterioration of the individual, poor job performance, and inadequate care given to their customers or patients (Freudenberger, 1975). As a result of his research, many others have built on his findings to strengthen the argument that burnout causes adverse outcomes for both the worker and the customer. Present-day researchers, who continue to develop Freudenberger's theory, have contributed to the development of notions that fit the current context, and this has resulted in recognition of nurse burnout. Due to multiple articles and the continued relevance of burnout, this silent epidemic has been officially recognized by the WHO as a disease as of May 28, 2019 (Eaton, 2019). The buildup and strengthening of burnout theories have shone a light on too many areas that this disease affects and have provided various ways to overcome and battle this epidemic.

Burnout

Burnout has been proven to be detrimental to the individual, including through effects on their mental health and job performance. Molina-Praena et al. (2018) conducted a meta-analytic study that focused on the levels of burnout in the medical area of nurses. Physical symptoms of

burnout result from psychological symptoms. Burnout comprises emotional exhaustion, depersonalization, and low personal accomplishment and is a result of untreated chronic stress (Molina-Praena et al., 2018). The psychological symptoms of burnout result from chronic stress at work and can affect others closely related to the individual (Melquíades Menezes et al., 2017). These elements have been linked to the decline of job performance, including the health of registered nurses.

The components of nurse burnout can lead to physical and psychological deterioration. Moss et al. (2016) concluded that burnout syndrome has both psychological and physiological symptoms that affect an individual's well-being (Moss et al., 2016). The physical breakdown of a nurse can range from exhaustion to inefficacy that can result in long-term job stress and psychological deterioration (Reith, 2018). These symptoms range from frustration, anger, and exhaustion, or insomnia (Moss et al., 2016). In addition, due to the physical and psychological collapse of nurses in one department, nurses in other departments can be at an increased risk as this disease can create a domino effect in a healthcare workplace.

Individuals at risk of burnout serve in various positions within the medical field. Melquíades Menezes et al. (2017) wrote a reflective analysis of burnout syndrome and how intensive care nurses are more at risk of suffering nurse burnout than other nurses in different departments. In addition, Kumar (2019) wrote an analysis of how the WHO has recognized burnout as a disease and how 63% of nurses working in hospitals suffer from burnout. According to de Paiva Fonseca and Mello (2016), the majority of nurses affected by burnout were intensive care nurses, and their burnout resulted from reduced materials and resources, a lack of organization of work, interpersonal relationships, and the excess noise in the environment. Fernandes et al. (2017) also came to the finding, in their systematic review of literature, that

intensive care nurses are at an increased risk of burnout. According to this study, the intensive care environment is a conducive environment for burnout (Fernandes et al., 2017). Nurse burnout is not only a recognized disease, but it also affects staffing ratios through turnover.

Turnover

There are several negative aspects of nurse burnout, and turnover is one of the most detrimental. There is a 30% turnover rate for nurses who have less than 1 year of experience within a clinical setting (Bong, 2019). Bong (2019) provided an explanation of nurses leaving the profession as a direct result of moral distress. In relation to the contributing factors to burnout and moral distress, nurses' reasoning for leaving their positions is often their work environment that prevents them from conducting safe care (Bong, 2019). When nurses feel unvalued and unsupported, these conditions lead to them quitting and seeking a more supportive working environment.

When nurses leave the profession, it contributes to an already recognized nurse shortage crisis noted by the American Nurses Association (Bong, 2019). This national shortage is estimated to continue through the year 2025 and cannot be fixed by hiring new nurses (Bong, 2019). Nursing shortages, due to attrition and turnover, can have adverse effects at local, regional, and national levels (Snavely, 2016). Burnout and fatigue lead to nurses' increased turnover after only a few years working in the profession, leading to 30%–50% of nurses changing jobs or leaving the medical field altogether (Snavely, 2016). There is an estimated shortage of 100,000 nurses by the year 2022, with 500,000 seasoned nurses retiring (American Nurses Association, 2017). Levels of burnout among floor clinical staff are disturbingly high, and there is a well-known belief that burnout and a lack of employee engagement add to high

turnover in the workforce (Willard-Grace et al., 2019). Short staffing can lead to poor employee engagement and unfortunate patient outcomes.

Staffing shortages can obstruct the care rendered by the registered nurse to the patient entrusted into their care. Aiken et al. (2018) studied the relationship between patient outcomes and staffing shortages. For example, staffing shortages result in an increased patient load that increases mortality rates by 7% following surgery (Aiken et al., 2018). Ulrich et al. (2019) implemented a study in an attempt to improve work environments to better the care provided to patients. For example, one way to improve patient outcomes is to ensure appropriate patient-to-staff ratios (Ulrich et al., 2019). In addition to appropriate staffing, results from a survey have shown that only 39% of the time units are 75% staffed (Ulrich et al., 2019). Turnover affects the hospitals, and patient outcomes are compromised because nurse burnout that results in staffing shortages affects how the remaining nurses can provide efficient and professional adequate care.

Patient Outcomes

Another area significantly impacted by nurse burnout is patient outcomes. When a nurse is suffering from burnout, the patients that the nurse cares for are at a higher risk for mortality, have decreased quality of care, and experience a decrease in patient satisfaction (Chullen, 2018). Reith (2018) wrote a narrative review of how burnout affects healthcare professionals, from nurses to physicians, and how it is detrimental to patient care. Nurses who are experiencing burnout have been found to have diminished connections with families and patients who are under their care, resulting in poor education and satisfaction scores (Buckley et al., 2019). Patient outcomes are affected by burnout and can result in increased infection and patient injuries (Dyrbye et al., 2019).

The effect of nurse burnout on patient outcomes can result in an increase in infections and patient injuries (Dyrbye et al., 2019). Among patient mortality and infections, patients are at an increased risk for medical errors. Nurses who are found to have fatigue and burnout are more vulnerable to making medical errors and showing poor judgment compared to nurses not experiencing burnout (Al Ma'mari et al., 2020). According to Moss et al. (2016), "Risk factors associated with BOS can be divided into four categories: (1) personal characteristics, (2) organizational factors, (3) quality of working relationships, and (4) exposure to end-of-life issues" (p. 371). Reith (2018) showed the impact on patient safety in relation to nurse burnout. The consequences of burnout have been shown to determine factors such as the inefficient care of patients. These consequences affect registered nurses when they experience burnout and are detrimental to patient care (Reith, 2018). The research further demonstrates how burnout can lead to an increased likelihood of malpractice, higher mortality, increased hospital infections, dishonest clinical decisions, poor clinical behaviors, a decrease in empathy, and increased alcohol abuse (Reith, 2018). These situations are at a higher probability when the environment is also indicative of burnout.

These adverse outcomes resulting from burnout syndrome also make it a challenging working environment for staff and can result in poor clinical decisions (Moss et al., 2016). Stimpfel et al. (2016) conducted research on patients experiencing better hospital stays. Patients' experiences with hospital care are significantly related to whether hospitals are well-resourced in relation to nursing, staffing, supportive work environments, and work hours (Stimpfel et al., 2016). The research provided evidence that a supported staff that is not experiencing burnout can offer better patient care and affect positive patient outcomes (Stimpfel et al., 2016). When patient

safety is the highest priority for all medical staff, it is crucial to intervene in areas that affect patient care.

Psychological Health

Burnout, if left untreated, can lead to a decline in an individual's physical and mental health. Psychologically, nurses will experience negative attitudes and a lack of concern for their well-being and the well-being of others around them (Fernandes et al., 2017). With a decrease in psychological stability, nurses are often left feeling overwhelmed and emotionally exhausted due to burnout (Fitzpatrick et al., 2019). At the individual level, burnout in nurses has been linked to numerous health-related complications, including musculoskeletal disorders, sleeplessness, fatigue, feelings of helplessness and depression, and anxiety (Chullen, 2018). All of these conditions begin with the psychological deterioration of an individual and trickle down into other negative outcomes, such as patient care (Chullen, 2018).

Psychological deterioration can begin with the notion that the individual reports high levels of stress and dissatisfaction (Krisberg, 2017). Krisberg (2017) showed the importance of addressing burnout due to the high rates in healthcare providers. Wilkinson et al. (2017) conducted a systematic review on burnout and its relationship to empathy in healthcare professionals. This review provided information on how empathy is a useful tool for therapeutic communication and how high levels of burnout can cause low levels of empathy (Wilkinson et al., 2017). Del Grosso and Boyd (2019) conducted a mixed-methods review on burnout and nurse anesthetists. The review provided evidence that showed the relationship between burnout and physical and mental health problems (Del Grosso & Boyd, 2019). Due to nurse burnout being a result of stress and psychological trauma, it is essential that the interventions used to help correct this epidemic involve a psychological approach.

Health Promotion Model

The HPM was written and developed by Dr. Nola Pender. The method includes a focus on patient care as well as contributing factors that can lead to negative behaviors. It has five key concepts of person, environment, nursing, health, and illness (Pender, 2011). Research on the HPM and self-care with coronary artery patients showed that utilizing the model to conduct self-care can improve the outcomes of the patients and their well-being (Khodaminasab et al., 2019). The HPM is known to detect behavioral issues early or help individuals function with their illness and limitations (Gonzalo, 2021). The HPM has been utilized in a variety of nursing studies and has been linked to meditational interventions. Because the focus of the HPM is on an individual's well-being and the individual's understanding of self and surroundings, it provided the foundation and theoretical framework for an intervention that includes mindfulness meditation.

Meditation

Meditation is not a recent discovery. D'Mello (2018) discussed how meditation dates back to 2700 B.C.E. in the form of yoga and how yoga helped explore the valuable links between mental and physical health. This method of meditation showed the importance of the benefits of mental health and how it can improve an individual's inner and outer well-being (D'Mello, 2018). Due to the positive effects of yoga, Hinduism was strengthened and recognized in 2000 B.C.E. as a religion that practiced meditation, which significantly influenced the shaping of an individual's mindset (Knott, 2016). Knott (2016) focused on the history of Hinduism as well as the positive psychological contributions it provides individuals who utilize its meditation. Daoism was founded in 600 B.C.E.; this form of meditation focuses on how the individual connects with others around them and how helping the individual stay in the present can increase

focus, psychological health, and physical ability (Kleeman, 2017). This led to the focus being directed on Buddhism, which emphasized the importance of enlightenment, and this form of meditation inspired more practices of mindfulness (Anālayo, 2019).

The term mindfulness was officially used by a British magistrate named Thomas William Rhys Davids in 1881, who founded the British Academy and London School for Oriental Studies (Stanley et al., 2018). Through the growth of meditation, mindfulness began to be considered separately from religion and spiritual belief and developed into its own force against psychological deterioration. It was not until 1979, when a student at MIT introduced Buddhism as a stress reduction course, that mindfulness truly began to take form and was utilized as a tool to decrease stress (Santorelli et al., 2017). Mindfulness meditation continued to grow in the 1980s, proving clinically that the method reduces stress and even chronic pain (Baer, 2019). Exercises were created and used to promote psychological health and reduce stress by Alfred James (James, 2020). The mindfulness exercises created by Alfred James, the founder of Pocketmindfulness.com, have continued to be implemented throughout the years within programs specifically designed to reduce stress and burnout.

Mindfulness Meditation

Alfred James (2020) wrote a book on mindfulness meditation and provided exercises that can be used to combat stress and anxiety. Alfred James's book, *Mindfulness Exercises*, contains multiple chapters on the importance of self-acceptance and inner peace (James, 2020). According to Frögéli et al. (2019), "Mindful awareness refers to focused, voluntary, and flexible attention to the present moment. In training mindful awareness to increase psychological flexibility, one would purposefully shift one's attention to various targets in the present moment" (p. 273). Devi and Mangaiyarkkarasi (2019) conducted a comparative study on the effects of laughter and

meditation on stress and anxiety among nursing students. Mindfulness is a mind–body practice that, when utilized correctly, can reduce anxiety and increase calmness and physical relaxation (Devi & Mangaiyarkkarasi, 2019). In addition, mindfulness can improve psychological behavior, help an individual cope with an illness, and enhance overall well-being (Devi & Mangaiyarkkarasi, 2019). Meditation can be utilized by nurses experiencing burnout to empower and decrease negative symptoms and outcomes.

Mindfulness meditation has been utilized as an intervention tool for multiple stress-related circumstances. Kang (2020) conducted research that addressed meditation as an alternative intervention for posttraumatic stress disorder (PTSD). Not only have meditational interventions been used for nurse burnout, but they have shown proven positive results when used with conditions as severe as PTSD (Kang, 2020). Bostock et al. (2019) studied mindfulness meditation as a means to reduce work stress and improve well-being. Goldberg et al. (2020) evaluated mindfulness and whether or not it proves effective in reducing stress. Psychosocial interventions using mindfulness have increased in popularity and are now used widely in the healthcare industry (Goldberg et al., 2020). Jamieson and Tuckey (2017) covered the importance of mindfulness interventions in the workplace and provided critiques of the current literature. The use of mindfulness meditation in multiple situations has resulted in the intervention thriving throughout the years.

The success of mindfulness meditation has led to an increase in research for over 30 years and has helped support interventions to improve the well-being of individuals suffering from burnout (Jamieson & Tuckey, 2017). Mindfulness, if utilized correctly, can provide a substantial improvement for nurses suffering from nurse burnout. For instance, findings show hospital leaders can develop policies for reducing burnout to improve nurses' morale and

improve the quality of patient care (Kim et al., 2019). The intervention of Alfred James's mindfulness meditation exercises can possibly reduce burnout and increase nurse satisfaction.

Mindfulness Meditation for Burnout

Although there have been meditational interventions to correct burnout, not many have focused on a psychological approach like mindfulness meditation to help decrease burnout in registered nurses. There have been many strategies to combat this debilitating disease, but the majority seem to only battle the physical and not the psychological. Delgado (2017) wrote an article on the importance of building resilience in critical care nurses. An effective way of exhibiting resilience is by removing oneself from a stressful situation, comparing the difficult situation to a previous challenging setting, and implementing a new approach (Delgado, 2017).

Stepping back and mentally observing a problematic situation can change the approach and outcome of difficult future situations. Brown et al.'s (2018) integrated literature review showed the correlation between resilience and nurse burnout. When nurses experiencing burnout can identify contributing factors that lead to the burnout, they can utilize tools they learned to help prevent the burnout (Brown et al., 2018). Jacobs et al. (2017) conducted a pilot study on the use of mindfulness skills to reduce stress. Another study by Jacobs et al. (2017) also showed mindfulness has become an evidence-based stress reduction program. Mindfulness is a form of psychological intervention to help reduce nurse burnout and has been found to improve the quality of care that nurses provide.

Self-Awareness

Mindfulness meditation has subcategories that help individuals approach this method of intervention in a variety of ways. Alfred James focuses on the importance of breathing and recognizes it as the fine line between life and death (James, 2020). Mindful breathing, a

foundation of mindfulness, is a simple practice that an individual can use without the aid of outside factors (Cho et al., 2016). Cho et al. (2016) conveyed how mindful breathing has been effective in reducing anxiety when used daily. This form of mindfulness affords the individual who is practicing the intervention the ability to take a moment and breathe through a stressful situation (Cho et al., 2016). Mindful breathing is not a stand-alone intervention but is supported when the individual also practices mindful observation.

Freeing the Mind

The second focus in Alfred James's mindfulness meditation exercises is on the importance of expelling negative behaviors (James, 2020). Through doing this, the individual practicing meditation will be able to label particular situations as negative (James, 2020). By freeing the mind, the individual will be able to become focused on being in the present.

Being Present

Through this basis of mindfulness, the individual is able to be in the present and connect with their surroundings to increase awareness and decrease the stress coming from the environment around them (Anālayo, 2018). In order to be in the present, Alfred James encourages individuals to purposefully pace to slow down their movements and to focus on their surrounding reality (James, 2020). The approach of slowing down life and learning to become fully engaged in the moment can decrease and limit stress (Tincher et al., 2016). This form of mindfulness can even reduce prejudiced thinking (Tincher et al., 2016).

Releasing Attachment

Alfred James believes in the need to remove one's self from technology for a day (James, 2020). This form of exercise allows the individual to detach from electronic sources and to limit distractions from the cyberspace world (James, 2020). When the individual is able to limit their

distractions, they can become more immersed in the moment and observe fine details of the world around them (James, 2020).

Self-Realization

This form of Alfred James's meditation exercises allows the individual to reconnect with nature (James, 2020). The use of this exercise will allow the individual to experience the value of life, including animals, in order to understand that every life is worth protecting and caring for (James, 2020). When the person is able to accomplish this exercise, they will begin to understand their own self-worth.

Self-Discovery

This mindfulness exercise helps an individual provide their own self with positive reinforcement, resulting in increased positive behavior and decreased negative behavior (Armstrong, 2018). Alfred James believed that an individual's self-worth is not as seen through the eyes of their peers but as seen through the eyes of the individual themselves (James, 2020). Once the individual is able to recognize their own self-worth, they can move away from negative outside projections of others and improve their internal image.

Self-Liberation

Not all exercises from Alfred James's book can be conducted indoors. This exercise needs to be completed outdoors and preferably on the individual's break. Individuals will be able to move away from loud noises and technology and immerse themselves in nature to decrease stress and anxiety (James, 2020).

Appreciation (Mindful Eating)

Another important area for individuals to practice is purposeful eating. The cooking, setting up, and eating of meals can help individuals appreciate the work they put into nourishing

themselves (James, 2020). This form of exercise can make the individual less greedy and more inclined to share with peers or strangers (James, 2020).

Understanding Nature of Mind

This mindfulness exercise promotes and encourages individuals to become more aware of internal thoughts that can alter external actions (James, 2020). The importance of the individual becoming aware of how they conduct themselves during difficult situations is both internal and external (Saunders et al., 2016). This type of mindfulness can contribute to an increase in neural performance and monitoring—common skill nurses need to possess to take care of critically ill patients (Saunders et al., 2016).

Being Here

This part of Alfred James's mindfulness exercises encourages individuals to be present and truthfully engage with their surroundings (James, 2020). This form of mindfulness can help the individual help heal the person they are caring for, and this form of mindfulness can also help an individual strengthen their empathy toward personal relationships with their patients (Rakel, 2018). Mindfulness has multiple subcategories and layers to help an individual better themselves both psychologically and physiologically, and due to this effect, the results have proven to be positive and beneficial to medical professionals.

Effects of Mindfulness Meditation

The effects of mindfulness meditation have proven to be beneficial for the healthcare community. According to Bostock et al. (2019), "Meta-analysis has reported that mindfulness-based psychological interventions decrease stress in healthy non-clinical populations and improve psychosocial outcomes for people with clinical disorders such as anxiety and depression" (p. 128). With the aid of mindfulness, stress can decrease, which improves the health

of nurses suffering burnout. A recent study showed that an 8-week course of mindfulness meditation could improve an individual's well-being and decrease stress (Bostock et al., 2019).

A systematic review of mindfulness and job burnout showed that six out of eight individuals showed a decrease in burnout after mindfulness training (Luken & Sammons, 2016). Another resource showed how an online 8-week course helped reduce burnout, showing that even online mindfulness interventions can result in desirable outcomes (Luk, 2016). A case study on burnout and mindfulness, along with compassion variables, in intensive care nurses showed an increase in the health of nurses and a decrease in burnout (Gracia-Gracia & Oliván-Blázquez, 2017). A journal article about mindfulness and its long-term effects on a subject's well-being showed that mindfulness produced long-term improvements after a 12-month period (Kinnunen et al., 2020). The effects of mindfulness have been shown to have an encouraging outcome on individuals who utilize the intervention for the betterment of their psychological and physiological well-being. This could possibly be the beginnings of a standard of care for nurses diagnosed with this disease.

Chapter Summary

Nurses and other healthcare professionals who provide selfless care to patients should be given adequate interventional tools to ensure their psychological health is maintained. Nurses who are given training, educational interventions, and tools to combat burnout will be better at defending themselves against this epidemic. However, these interventions and modifications are often missing from healthcare establishments, and nurses are left combating this disease without outlets.

This literature review provided evidence as to why this issue needs to be addressed and intervened against. The review elaborated on the historical overview of nurse burnout, issues that

arise from burnout, the HPM, history of meditation, and mindfulness meditation, as well as subcategories of mindfulness meditation and how mindfulness provides beneficial results to healthcare professionals. This section of the project covered the published articles and literature related to nurse burnout and the potential of meditation approaches.

Chapter 3 provides the methodology for the project, how the project was developed, who was involved, what happened during the implementation, where it happened, and how it happened. Chapter 3 includes details of how data were collected and analyzed and the statistical methods that were used to measure the data.

Chapter 3: Research Method

Alfred James's mindfulness meditation exercises have the potential to be an effective strategy for reducing depression. Mindfulness meditation has beneficial results when utilized by individuals suffering from psychological decline (Parrish et al., 2019). Mindfulness meditation courses should be provided to medical staff to help reduce the chances of nurse burnout. Mindfulness meditation originated from Buddhist spiritual practices to help restore wholeness and reduce suffering, illness, and pain in individuals (Hazlett-Stevens, 2018). Mindfulness is effective in reducing the symptoms of anxiety and depression among individuals diagnosed with other psychiatric medical conditions as well (Hazlett-Stevens, 2018). Implementing a program that aims to reduce nurse burnout by bringing awareness to negative behaviors can help improve a nurse's response to stressful situations to hopefully decrease burnout. Infusing mindful meditation techniques has proven to minimize nurse burnout and turnover. Therefore, it is vital to immediately implement effective corrective measures to ensure positive and productive outcomes. This chapter provides the methodology for this project.

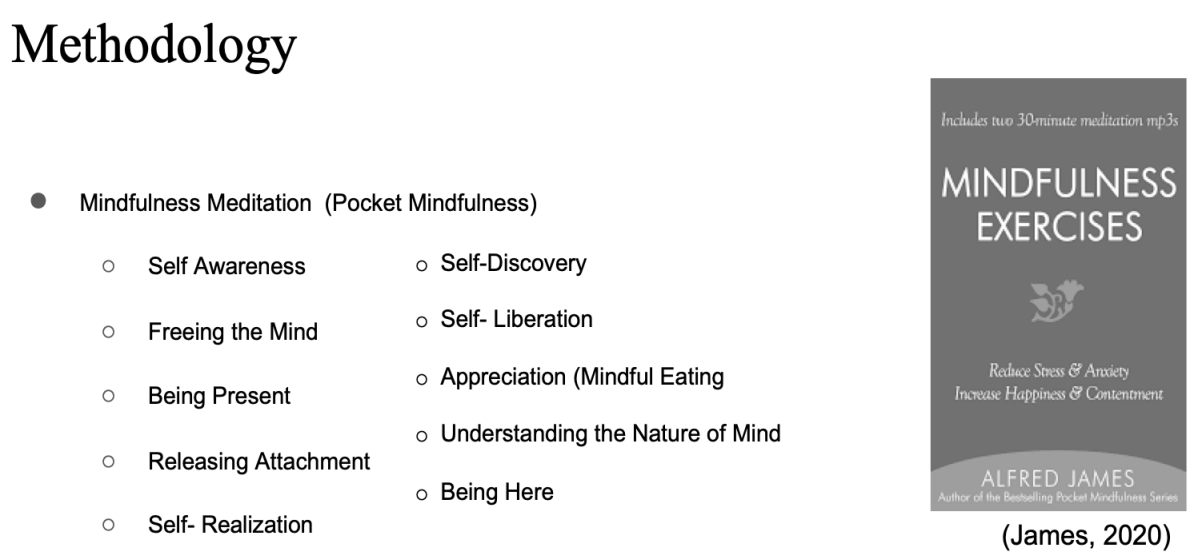
Project Design

This project was designed as a quantitative, descriptive, pretest–posttest study with an educational workshop intervention to reduce nurse burnout. The variables were measured one time before the 8-week intervention and again following the course's completion. There was no control group or random selection. The nurse participants' involvement was solely based on a volunteer basis. Marketing for the study was accomplished through flyers with explanations and information shared through emails with the entire intensive care unit staff (see Appendices A and B).

A descriptive design was chosen to help summarize and describe the implementation process and the participants' use of Alfred James's mindfulness meditation exercises to decrease burnout (see Figure 2).

Figure 2

Concept Model of Alfred James's Pocket Mindfulness



(James, 2020)

The concept model (Figure 2) shows the components within Alfred James's *Pocket Mindfulness*. These are the 10 components of mindfulness meditation that a participant could have used during the implementation phase of this project.

During the implementation of the project, a pretest and posttest were used to determine whether the intervention helped decrease the nurse participants' burnout scores. There was an educational course provided on Zoom after the pretest was completed. This course provided the participants with knowledge on burnout and how mindfulness meditation could be used to help reduce their burnout. Additional one-on-one Zoom meetings were also provided on a weekly,

and sometimes daily, basis for each participant to ensure they felt supported. Participants were then given a follow-up meeting for closure of the study.

The objectives were presented for this project to go over the important factors and key points within nurse burnout. The first project objective ensured that at the end of the educational intervention, the nurses would recognize the signs and symptoms of nurse burnout. The objective helped convey the importance of providing a foundation to support the nurses' understanding of what was learned and the importance of why it was vital to develop the awareness of this knowledge.

Handouts were provided and given to the nurse participants so they could write down their experiences or identifiers of burnout as evidence collections (see Appendix C). Continued support, emails, text messages, interventions, and explanations were conducted to ensure support. Educational sessions for nurse participants experiencing burnout were adjusted to meet and enhance the nurses' progress at their levels. Surveys were taken from nurses experiencing burnout (before and after the intervention), and this helped identify the gap in practices. A PowerPoint presentation was used to emphasize all the necessary information and tips for nurses to view and gain new knowledge. Through this process, the hope was to increase nurse job satisfaction and decrease nurse burnout to result in effective and successful patient care and safety.

The 32 nurse participants were first administered a version of the Maslach Burnout Inventory – Human Services Survey for Medical Professionals (MBI–SHS MP). An individual burnout rating was earned by each participant based on their responses (Mind Garden, 2020). Due to the licensure agreement of the MBI–SHS MP, only 32 participants could be used without additional charges. The participants were then given an educational course that explained the

purpose of the MBI–SHS MP instrument and presented symptoms of burnout, the effects of burnout, and how mindfulness meditation could be utilized to help decrease their risk of nurse burnout (Mind Garden, 2020). The participants were then asked to use their newfound knowledge with mindfulness meditation and apply it for 8 weeks in their working environment, in which results would be unbiased and produce validation. After the 8-week intervention, the same 32 participants were asked to retake the MBI–SHS MP (Mind Garden, 2020) to allow for comparing and creating valid statistical data. Then, a postclass was offered for the participants to evaluate their old and new results, which provided clear feedback, and the project concluded.

Instruments and Measurement Tool

The instrument used to measure burnout has been the most commonly used measuring tool to date. The Maslach Burnout Inventory (MBI) uses questionnaires and surveys developed by multiple professionals in the field of psychology (Poghosyan et al., 2009). The MBI has various surveys that can be used to identify burnout in not only the medical field but other fields as well. For this project, the specific survey used was the Maslach Burnout Inventory – Human Services Survey for Medical Personnel (MBI-HSS MP). This survey is specifically designed for the medical field to identify three vital components of burnout: emotional exhaustion, depersonalization, and personal accomplishment (Poghosyan et al., 2009). To do this, the survey contains 22 questions that require the participant to answer using phrases describing the frequency in which that particular incident happens. For example, one question asks if the participant feels depressed at work, to which the participant marks one of the following: *never*, *a few times a year*, *once a month or less*, *a few times a month*, *once a week*, *a few times*, or *every day*. These results are then placed into a number value so the Mind Garden application can sum the results and give the participant an exact number to determine their burnout scores.

Emotional Exhaustion

The measurements within the MBI-HSS MP cover three main topics of emotional exhaustion, depersonalization, and personal accomplishment to determine the participant's burnout score (Mind Garden, 2020). The emotional exhaustion factor measures the participant's exhaustion from work, including areas causing this exhaustion (Mind Garden, 2020). The way the MBI-HSS MP works is to determine a participant's emotional exhaustion scores by requiring the participant to answer each question honestly based on how they emotionally feel at work. The MBI-HSS MP supplies the participant with questions relating to the area of testing. For example, for the statement "I feel emotionally drained from work," the individual is asked to answer using a scale to derive a summed-up conclusion in the end (Mind Garden, 2020).

Depersonalization

The depersonalization aspect of the survey measures the nurse participant's impersonal responses toward their patients and their patients' needs (Mind Garden, 2020). For depersonalization, the participants were also asked to base their responses on a phrase scale. These questions were embedded within both the emotional exhaustion and personal accomplishment questions, so the participant taking the MBI-HSS MP could not alter the test for personalized results.

Personal Accomplishment

Personal accomplishment measures the nurse participant's understanding of their accomplishments and achievements within their work (Mind Garden, 2020). The MBI-HSS MP has been trusted and used for 35 years since its publication, proving its validity and ability to determine burnout in nurses (Mind Garden, 2020). For personal accomplishment, an example question is, "I can easily create a relaxed environment" (Mind Garden, 2020). The participants

then answer the questions using the phrase scale to determine their personal accomplishment score.

To provide validity of the MBI-HSS MP, an article has been identified that offers an example of how the survey measures nurse burnout. In this article, the authors discussed the measures written for the validation of the survey and the measures of psychometric properties and reliability of the instrument and relayed their discoveries that the survey showed reliable and concise results in identifying burnout (Córdoba et al., 2011). Due to its strong support of the survey for nurse burnout, the MBI-HSS MP was used.

Reasons for Model and Instrument

The HPM was chosen due to its parallel similarities to nurses' burnout and the need for intervention. The model was constructed to improve the outcomes of patients by identifying and correcting a problem using behavioral modifications. This same model can be applied to nurses to identify, educate, and evaluate nurses' knowledge of burnout before they suffer the symptoms of the disease (Pender, 2011). This can also be said about the MBI, as various researchers have used the MBI because of its validity.

The MBI–HSS MP instrument was used for the project because it was designed explicitly to break down situations and collect data that measure burnout within the medical field. This survey and the HPM were molded together to create a robust educational course for nurses that used mindfulness meditation as the intervention. The survey also helped identify the nurse participants' risk factors for nurse burnout, while the HPM was used as a base that educated nurses on ways to identify and reduce burnout symptoms by altering negative behavioral patterns.

The advantages and disadvantages of the MBI were both summed up by an article put together for a psychological assessment. This article, written by Kleijweg et al. (2013), made it clear that the MBI is a validated tool for measuring burnout with good statistical results; however, it may increase the risk of overdiagnosing individuals with burnout. This is why the MBI-HSS MP was combined with the HPM to better define nurse burnout without overdiagnosing in the process.

The HPM and MBI-HSS MP were essential and vital to help identify nurse burnout by educating the nurse participants on signs and symptoms. This helped nurses identify burnout and use methods received in their educational course (based on the HPM) to better recognize burnout and implement change before they suffered from the side effects of the disease (Figure 1).

Data Collection, Management, and Analysis Plan

The MBI-HSS MP was used as a pretest and posttest for this project (Willard-Grace et al., 2019). It was utilized to determine the percentage of burnout among the 32 nurse participants. The MBI-HSS MP is a portion of the original MBI specifically designed to rate the burnout percentage of medical professionals. The survey questionnaires are in direct relation to a medical professional's understanding and relate to their everyday interactions (see Appendix D).

The MBI-HSS MP was the only tool used to tangibly measure the pre-intervention burnout levels of the intensive care nurses in addition to their burnout levels 2 weeks after the interventional phase. Through the online questionnaire provided by Mind Garden, the participants were able to log in and answer the survey questions. These results were then evaluated, measured, and placed into statistical results for the project. The answers obtained through the online program ensured the participants' privacy was maintained, and only results, not names, were pulled from the survey.

Mindfulness meditation is a public domain idea, but the exercises that were utilized were based on Alfred James's *Pocket Mindfulness*. Permission was granted by Alfred James (see Appendix E). Approval to use the HPM was granted by Nola J. Pender, PhD, RN, FAAN (LL) via email. She was contacted through the University of Michigan School of Nursing email database (see Appendix F).

Approval for the project was granted by the governing bodies. The MBI-HSS MP was requested and approved by Mind Garden to be used for this project (see Appendix G). Authorization for 32 surveys was obtained, and licensure to relay results within this project was approved as well. Appendix H shows the permission and license for use. The permission to implement the project at the hospital facility was first granted by the intensive care director as a courtesy request. The ultimate decision for approval was made by the Chief Nursing Officer, who granted approval for the project to move forward. The facility has no Institutional Review Board (IRB). Please see Appendix I for approval.

Methodology

The project was a quantitative, non-experimental, descriptive pretest–posttest pilot study of an educational intervention that considered the variables of mindfulness meditation and burnout. The foundation of the data measured came from the pretest survey before the first week of the educational intervention and the implementation of mindfulness meditation. The data incorporated were results from the MBI-HSS MP. The variable was measured one time before the educational intervention and one time after the full 8-week implementation. There was no control group and no randomization. The descriptive design provided a summarization of scores between burnout and mindfulness meditation. The descriptive statistics were calculated using the

Wilcoxon test. The Wilcoxon test was used because of the number of participants and because it measures the same group twice and provides results on whether the intervention was successful.

The facility did not need to consent for their employees to participate because the employees participated outside of work time and on a voluntary basis. Participants filled out a consent form, which was obtained before the first Zoom group meeting. The approval for the project to be implemented at the facility came from the Chief Nursing Officer. No IRB was needed per the educational assistant director. Courtesy approval was granted by the intensive care nursing director who oversaw the project.

Feasibility and Appropriateness

The feasibility of the project included the number of volunteer nurse participants attending the 8-week workshop and implementing the intervention. I was responsible for sending out emails inviting participation in the project and the link to the survey, providing the educational course, calculating results, and providing guidance and feedback. I was also responsible for providing a framework for the establishment where the project took place, as well as detailed information of the project and intentions. I was also accountable for arranging times and dates for the educational course, support system, and project development.

IRB Approval and Process

According to the Assistant Clinical Director of Education, the establishment where the project was implemented does not require an IRB (see Appendix J). The ACU IRB application was completed after the proposal defense.

Interprofessional Collaboration

The goal of the educational intervention was to help nurses experiencing burnout decrease their symptoms and improve their psychological well-being. The interprofessional

collaboration between the project and the objectives aligned well with the establishment's own mission of putting patients first. The facility the project was implemented at is well known for being a teaching hospital that prioritizes the needs of patients. Because the subject of nurses experiencing burnout directly impacts the model, leaders of the establishment were open to conducting this project to promote awareness and help reduce the unwanted symptoms of burnout among their staff. The stakeholders, such as the nurse managers, also expressed an interest in reviewing results and possibly utilizing the intervention in staff meetings if the results were desirable.

The stakeholders were initially management, the education department, and even the nurse participants who were associated with the project as this project affected them all. Management and the education department of the establishment were supposed to play a part in the administration of this study, but due to the COVID-19 pandemic, they were unable to fulfill their parts. All of these responsibilities were then placed on me, with the nursing participants still completing their parts. Management was responsible for overseeing everything and ensuring all was done for the betterment and safety of the nurses, but this ended up being my responsibility. The education department was the responsible party in charge of educating the staff about the issue and possible changes to take place, but due to the pandemic, this was made my responsibility. Nurses involved with the project were responsible for answering questionnaires, testing out mindfulness, and implementing it as well as completing a postquestionnaire to establish project stability and outcomes. All the roles and obligations were discussed at the implementation of the project; however, alterations had to be made due to the extenuating circumstances of the pandemic.

The objectives that were covered during this project described the important factors and key points within nurse burnout. The first project objective ensured that at the end of the educational intervention, the nurse participants would be able to recognize the signs and symptoms of nurse burnout. Second, at the end of the educational intervention, the nurses would be able to identify effective nurse burnout corrective measures. Third, at the end of the educational intervention, the nurses would be able to discuss appropriate preventable measures for burnout. Additionally, the nurses would be able to explain the connection between nurse burnout and the outcomes of nursing care. Last, at the end of the educational intervention, the nurses would be able to explain the contributing factors to nurse burnout as well as the use of mindfulness meditation to reduce symptoms. These objectives convey the importance of providing a foundation to support the nurses' understandings of what was learned and the importance of why it is vital to develop the awareness of this knowledge.

Practice Setting

The setting for the project was a suburban hospital in Southern California with approximately 800+ staff and 60+ physicians. The facility was recently bought by a larger corporation but has been in the community for over 100 years. The hospital plays a vital role in the community's well-being and health promotion. The establishment recently became a stroke center and provides neurology care to patients and their families. The facility is a teaching hospital and provides the basis for interventions to better the welfare of patients and staff members. The educational portion of the project took place online via Zoom. The implementation portion of the project took place in the intensive care unit.

Target Population

The target population for this project was registered nurses who worked in the intensive care unit. Inclusion criteria included nurses with any number of years of experience, either male or female, and within any age group. The participants for the project had intensive care specialty as their job title and represented a portion of the entire intensive care staff. The targeted sample size was 32 nurses to allow for appropriate statistics (see Appendix A).

Risks and Benefits

There were no anticipated or known risks associated with the consent procedure, collection of participant information, completion of the MBI-HSS MP, or data measurements. Possible risks that may have been involved were privacy-related issues. Participants were encouraged to maintain an anonymous identity when filling out the MBI-HSS MP. Online information was stored under a file protected under two security passcodes. Nurse participants were also instructed not to share their survey with others or make duplications due to copyright laws. Primary communication took place via Zoom, and participants were informed in writing about participation being on a volunteer basis only.

All personal information was kept confidential and was not shared with anyone but me. The information the participants input in the survey remains stored online on a password-protected website, and access is maintained only by me. A random nickname was assigned to all participants; no other identifying information was utilized.

The benefits for the nurse participants involved in the project included receiving valuable burnout information as well as mindfulness meditation to help combat the disease. Burnout information included the relationship between poor psychological and physiological habits and

the issues they can cause if left untreated. Nurses were also given input on where their burnout derived from based on their individual test scores and percentages of burnout.

There was no monetary compensation or other rewards given for participation in the project. With all this taken into consideration, the participants were asked to offer their free time to complete portions of the project. Participation was solely on a volunteer basis; therefore, participants were welcome to remove themselves from the project at any time. All precautions were taken to ensure the safety, privacy, and well-being of all participants within the project.

Timeline

The timeline for the project followed a strategic plan. Before the start of week 1, the nurse participants were sent an email with a link to fill out the MBI-HSS MP. This helped provide information for week 1 and time for me to incorporate these results for the participants to visualize in the PowerPoint.

After the pretest was taken by all participants, week 1 followed. Week 1 covered an introduction to the project, pretest results, an educational course on burnout, mindfulness meditation, and what to expect in the weeks to come (see Table 1). Week 1 took place at a Zoom meeting. To ensure the privacy of participants, the Zoom meetings were completed one-on-one.

Table 1

Week 1 of Week-at-a-Glance

Objective	Content	Time frame	Teaching method
Week 1: Objective 1	• Introduction to course • Explanation of pretest results, educational course on burnout, mindfulness meditation, and what to expect in the weeks to come • Questions and feedback	4	In person PowerPoint Handouts

Weeks 2–7 involved a Zoom meeting to help provide encouragement but did not involve my interventions on any level. At the end of week 8, the participants retook the survey, and the posttest results were calculated. During week 10, I completed a postcourse PowerPoint that included the statistical results of the project and reinforced the educational material presented. The participants were able to engage in group discussions based on their pretest and posttest scores (see Appendix K).

Chapter Summary

Chapter 3 focused on project design, instruments and measurement tools, data collection, management and analysis of the plan, methodology appropriateness, feasibility and appropriateness, IRB approval, interprofessional collaboration, practice setting, target population, risk and benefits, and timeline. The chapter also included a discussion of how theories and surveys will prove beneficial in identifying those at risk, implementing educational interventions, and helping nurses correct poor behavior that leads to nurse burnout. The MBI-HSS MP and the HPM can help with the correction of the silent epidemic known as nurse burnout. The implementation of mindfulness meditation provided insight into methods that can be used to help reduce the symptoms of nurse burnout.

Chapter 4: Findings

Purpose of the Project

The purpose of this DNP project was primarily to establish and implement mindfulness meditation in an attempt to decrease burnout in intensive care nurses working at a suburban medical center in Southern California. This project highlighted the need to be prospective in approach rather than retrospective. With the educational intervention on burnout and mindfulness meditation, the nurses in a cohort group took an 8-week interventional session and utilized mindfulness meditation to improve the outcomes of the nursing participants. The research question guiding the study was: Does an educational intervention of nurse burnout and mindfulness meditation practice reduce the burnout symptoms in intensive care nurses who adhere to an 8-week program that focused on identifying burnout symptoms? A total of 32 nurses participated in this study, with retention of 31 nurses. Chapter 4 summarizes the project findings. The project connected a substantial amount of published works, evidence-based practices, and recommendations based on findings within the project.

The research was based on the importance of decreasing the possibility of nurses becoming victims of burnout because of the negative effects and detrimental outcomes for both the patient and the registered nurses (Bottini et al., 2020). Additional research has highlighted the importance of implementing interventions before burnout becomes physical. When burnout in nurses becomes physical, it is displayed through fatigue, body aches, and even poor bodily functioning (Bottini et al., 2020). The physical decline of the registered nurse could impair their ability to function safely, so decreasing burnout symptoms before they affect the delivery of patient care is of the highest priority (Bottini et al., 2020). The problem measured in this project helped determine whether an educational intervention on burnout and the utilization of

mindfulness meditation could help improve healthcare workers' burnout scores as measured by the MBI-HSS MP.

Burnout is a strong contributor to the physical and psychological decline of medical staff, specifically bedside care registered nurses. Since the onset of the COVID-19 pandemic, burnout has increased at an alarming rate. Lack of interventions to help combat burnout can lead to workplace deterioration, poor patient care, and an increase in safety issues (Bottini et al., 2020). The implementation results suggested the project did satisfy acceptable burnout scores for the participants in the project, and the facility should consider these strategies to combat this chronic disease.

In order to minimize nurse burnout, nurses must learn to apply their gained knowledge and skills to cope with, adapt to, and decrease unwanted stressors to increase positivity at work (Waddill-Goad, 2016). The breakdown of nurses, both physically and mentally, can lead to a multitude of destructive consequences. Poor adaptation and a lack of resources can lead to the deterioration, emotional exhaustion, and depersonalization of nurses battling a stressful work environment. The project explored the utilization of mindfulness meditation as an implementation tool to determine whether or not nurses' burnout scores, as measured by the MBI-HSS MP, would decrease over an 8-week intervention based on the tools found within Alfred James's (2020) *Pocket Mindfulness*.

Discussion of Demographics

Demographics did not play a role in this study, as the participants were not selected based on race, gender, or age. A total of 32 registered nurses worked the floor in the intensive care unit in a suburban community hospital, but only 31 completed the project. A total of 22 female and 10 male registered nurses ultimately volunteered for this study, with one female nurse voluntarily

leaving the organization before the study's conclusion. All participants were between 22 and 50 years of age. All participants' nursing experience ranged from 6 months to 30 plus years. Because they did not play a role, the demographics were not statistically calculated; however, they are included for transparency.

Descriptive Statistics

Table 2 displays the frequency calculations for the burnout categories of the MBI-HSS MP before and after the mindfulness meditation intervention. The percent of high emotional exhaustion scores declined (48.4% to 22.6%), whereas the percentage of nurses in the low-emotional exhaustion group doubled (22.6% to 48.4%). Low scores for emotional exhaustion are favored and show a clear understanding of a decrease in emotional exhaustion from pretest to posttest numbers. When nurses score low in emotional exhaustion, they are better equipped, emotionally and mentally, to care for patients. For depersonalization, the percentage of nurses in the high depersonalization category decreased (45.2% to 22.6%). Lower scores in the depersonalization category are also favored, and the results showed that over the 8-week course, the participants progressed in a positive direction. In this area of the MBI-HSS MP, lower scores are preferred because they show that the nurse is aware of their surroundings and is in tune with their patients' needs. For personal accomplishment, the moderate personal accomplishment category tripled in size (9.7% to 38.7%). For personal accomplishment, higher scores are favored, and the calculations showed the participants also performed better than before the utilization of mindfulness meditation (see Table 2). In this area within the MBI-HSS MP, nurses' scores are preferred in the higher numbers because they show that the nurse is conscious of their self-worth and enjoys the positive care they provide for their patients.

Table 2

Frequency Counts for MBI-HSS MP Categories Pretest and Posttest

	Before			After		
Burnout scale	Category	*n*	%	Category	*n*	%
Emotional Exhaustion[a]						
	Low (Under 18)	7	22.6	Low (Under 18)	15	48.4
	Moderate (18–29)	9	29.0	Moderate (18–29)	9	29.0
	High (30+)	15	48.4	High (30+)	7	22.6
Depersonalization[a]						
	Low (Under 6)	11	35.5	Low (Under 6)	15	48.4
	Moderate (6–11)	6	19.4	Moderate (6–11)	9	29.0
	High (12+)	14	45.2	High (12+)	7	22.6
Personal Accomplishment[b]						
	High (Under 34)	17	54.8	High (Under 34)	8	25.8
	Moderate (34–39)	3	9.7	Moderate (34–39)	12	38.7
	Low (40+)	11	35.5	Low (40+)	11	35.5

Note. $N = 31$.

[a] Lower scores are more favorable.

[b] Higher scores are more favorable.

Research Question

The project addressed one specific research question: Does an educational intervention of nurse burnout and mindfulness meditation practice reduce the burnout symptoms in intensive care nurses who adhere to an 8-week program that focused on identifying burnout symptoms?

Answering the Research Question

Table 3 shows the Wilcoxon matched-pairs tests comparing the pretest and posttest scores for the 31 nurses. The Wilcoxon test was used instead of the more common paired *t* test

due to the sample size ($N = 31$). Emotional exhaustion was found to have a significant reduction ($p = .04$), and personal accomplishment scores were found to have a significant gain ($p = .04$). Though not statistically significant ($p = .12$), depersonalization scores also declined (see Table 3).

Table 3

Wilcoxon Tests Comparing Pretest and Posttest MBI-HSS MP Scores

MBI–SHS MP score	Time	*M*	*SD*	*z*	*p*
Emotional Exhaustion[a]				2.10	.04
	Before	29.87	15.05		
	After	19.55	11.97		
Depersonalization[a]				1.57	.12
	Before	11.35	8.81		
	After	8.16	6.02		
Personal Accomplishment[b]				2.07	.04
	Before	31.55	10.51		
	After	36.52	6.74		

Note. $N = 31$.

[a] Lower scores are more favorable.

[b] Higher scores are more favorable.

Although confusing for some, the MBI-HSS MP scores are simple to explain. The scores are based on a numeric calculation centered on the participant's response to the questions within the survey.

Emotional Exhaustion Scores

The scores rendered from the study provide an overview of the nurse participants' feelings of being overextended and exhausted at their jobs. The scores were calculated based on how the participants answered the individual questions within the survey that were directed to

the emotional exhaustion portion. The Wilcoxon test showed that within the emotional exhaustion component, the participants' mean score before the mindfulness implementation was 29.87, and this showed that the participants as a group were suffering from moderate emotional exhaustion. After mindfulness meditation was implemented, the mean score improved from 29.87 to 19.55, showing improved emotional exhaustion scores from moderate to low levels of emotional exhaustion.

Depersonalization Scores

The scores were also based on questions answered specifically for depersonalization. This area within the MBI measures the impersonal response from the participant to the one they were caring for. The Wilcoxon test showed that within the depersonalization component, the nurse participants' mean score before mindfulness implementation was 11.35, and this showed that the participants as a group were suffering from moderate to high depersonalization. After mindfulness meditation was implemented, the mean score improved from 11.35 to 8.16, showing improved depersonalization scores from moderate–high to mid moderate levels of depersonalization.

Personal Accomplishment Scores

The scores were also based on questions answered specifically for personal accomplishment. This area within the MBI measures the feelings of competency and effective achievements from the participants' work. The Wilcoxon test showed that within the personal accomplishment component, the nurse participants' mean score before mindfulness meditation implementation was 31.55, and this showed that the participants were showing a moderate level of burnout within this area. After mindfulness meditation was implemented, the mean score improved from 31.55 to 36.52, showing a small improvement of scores from moderate–high to

lowmoderate levels within personal achievement. For this measurement, lower numbers signify burnout. A higher score in this section indicates the participant's perception of their self-accomplishments.

Reliability/Validity

The MBI is a validated tool that has been used worldwide and in hundreds of burnout studies. This tool has been noted to provide statistical and sound data in relation to the nurse participant and their burnout scores, as well as reliability in screening individuals for burnout (Riley et al., 2018). One study showed that the consistent use of the MBI to screen for burnout can help provide precise figures on the burnout of healthcare staff working in an intensive care unit (Sanfilippo et al., 2020). With this and the research provided in Chapter 3, it only goes to show that the MBI is not only validated but trusted.

Chapter Summary

In conclusion, this project used data from 31 nurses to establish and implement a primary mindfulness meditation intervention to help decrease burnout among intensive care nurses working at a suburban medical center in Southern California. The nurse participants learned mindfulness meditation exercises to help combat the burnout they were experiencing. The participants became more mindful of their negative surroundings and negative responses that trigger burnout, as well as ways to improve their psychological health and work environment to better their nursing care. This resulted in reduced stress, less burnout, and psychological improvement for participants of this study. The research question guiding the study was: Does an educational intervention of nurse burnout and mindfulness meditation practice reduce the burnout symptoms in intensive care nurses who adhere to an 8-week program that focused on identifying burnout symptoms? Significantly favorable declines in emotional exhaustion were

noted as well as significantly favorable increases in personal accomplishment (Table 3). In the final chapter, the findings are compared to the literature, conclusions and implications are drawn, and recommendations are suggested.

Chapter 5: Discussions and Findings

Chapter 5 summarizes the project findings and offers interpretations related to the framework of the study. The chapter connects findings from the project's results to the published literature, as well as provides recommendations, accounts for the study's limitations, and sets groundwork suggestions for future research.

Interpretation of Findings

The 8-week interventional workshop focused on the nurse participants utilizing mindfulness meditation as a resilience skill to decrease burnout. The project's interventional tool was Alfred James's (2020) *Pocket Mindfulness* meditation exercises and an educational training session on nurse burnout. The assessments of the participants assisted in creating an intervention guideline that can be used to help decrease burnout among registered nurses working in the intensive care unit setting. The retention of participants (96.8%) indicates the workshop is practical for employees in a workplace setting. It is important to consider the project was entirely based on the involvement of the staff willing to change, and staff must be informed that change will potentially happen only with their willingness to adjust their current approach to their clinical practice.

The nurse participants showed a great increase in psychological and physical improvement after they used mindfulness meditation to combat stressors within the intensive care unit. The areas in which the participants had the most significant change were emotional and personal accomplishments. Emotional showed a significant reduction ($p = .04$) and personal accomplishment showed a significant gain ($p = .04$). The participants' emotional scores doubled (22.6% to 48.4%), showing the participants had a dramatic positive improvement in their emotional well-being. The participants' personal accomplishment scores also improved (9.7% to

38.7%), nearly tripling their previous low scores and showing a strong improvement of the participants' views of themselves in a positive stance. Even though depersonalization did not show a significant change ($p = .12$), the numbers still decreased from a moderate-high level of burnout to a moderate low level (45.2% to 22.6%). The numbers provided valuable insight into the significant changes that can be made by utilizing mindfulness meditation to combat nurse burnout.

A majority of the nurse participants expressed interest in advancing this project further up management to help decrease burnout on floors other than the intensive care to help other nurses who are experiencing burnout within the hospital. Two participants expressed gratitude for the project, as it helped them cope with unwanted stress and increased their engagement with their patients and coworkers. Comments from the participants during the post class included, "Thank you for showing me where my burnout came from and how to correct the problems!" and "We need management to implement this project on every floor in this hospital, so every nurse is given tools to combat this burnout we are all experiencing from the pandemic!" Additionally, at the end of the educational intervention, the nurses were able to identify effective nurse burnout corrective measures. Also, at the end of the educational intervention, the nurses were able to discuss appropriate preventable measures for burnout. In addition, the nurses were able to explain the connection between nurse burnout and outcomes of nursing care. Last, at the end of the educational intervention, the nurses were able to explain the contributing factors to nurse burnout as well as the use of mindfulness meditation to help reduce the symptoms.

Emotional Exhaustion Results

With a significant change (48.4% to 22.6%), the participants were able to stagnate their burnout and improve their emotional well-being. At the pretest, there were 15 nurses with high

emotional exhaustion, and this number went down to seven nurses. Those with low exhaustion improved from 22.6% to 48.4%. When emotional exhaustion was measured before implementation, the participants showed doubt in their individual scores; however, after implementation, the nurse participants agreed that their pretest scores were, in fact, valid because they felt as if they were in a better place mentally. Some nurses expressed their doubts of the original scores stating, "I'm fine . . . I feel fine . . . there is no way I'm emotionally fatigued because I feel fine," and these expressions were turned into belief after the implementation phase. Participants who improved drastically within emotional exhaustion showed gratitude, stating, "If I hadn't known about where I was, I wouldn't have gotten to where I am" or "I feel as if a weight was lifted from me, and my brain fog got better over time using mindfulness." These comments were backed up by the improvement in the group's mean score from moderate–high emotional burnout to moderate–low emotional burnout (29.87 to 19.55). Similar to the emotional exhaustion scores, personal accomplishment also showed a tremendous improvement.

Personal Accomplishment Results

Because nurses are already praised by family members and strangers for being registered nurses, the personal accomplishment scores tripled in size. Before the implementation took place and the participants were given their pretest scores, many of the participants believed they were not doing enough and felt defeated every day coming into work. From a low score to a high score (9.7% to 38.7%), as higher scores are favored, it was no surprise that the participants' comments completely changed after implementation. Comments from the participants during the postclass ranged from "I now understand why my mom is proud of me" to "I am never saying I am just a nurse ever again." Their internal views of themselves and their image drastically improved, and this was validated with an improved mean group score of high personal

accomplishment to a moderate–low personal accomplishment score (31.55 to 36.52). Similar to the emotional exhaustion scores, personal accomplishment scores also improved and showed a significant gain; although not statistically significant, depersonalization also showed improvement.

Depersonalization Results

The scores for depersonalization were not statistically significant, but they did improve (45.2% to 22.6%). Almost half of the participants displayed high depersonalization burnout, but after the intervention, burnout decreased by half. Although not statistically significant, the posttest scores showed the nurse participants were headed in a positive direction. Some participants expressed their satisfaction with their results through positive comments such as "I feel like I understand my patients' needs" or "When I am at work, I really learned to be at work and not daydream about home." This showed that a little difference goes a long way. These results were backed up with the mean group score improving from moderate high depersonalization to moderate–low depersonalization (11.35 to 8.16).

Due to the results and the input from the nurse participants, this project offers the possibility of combating nurse burnout before it becomes a hazard to the working environment and patients' safety. By helping the nurses recognize they were victims of burnout as well as ways to identify early symptoms, the nurses were prepared with ways to decrease their chances of experiencing burnout. This project has the potential to decrease burnout among floor nurses, increase patient safety, and decrease organizational costs resulting from turnover.

Limitations

There were only a few limitations of this study. One of the limitations was the retention rate of 96.8% from 32 nurse participants and the loss of one, making a total of 31 final

participants. This resulted in the exclusion of the 32nd participant's original test scores before running the final numbers of both the pretest and posttest.

The second limitation for the project was the fact that the implementation tool, mindfulness meditation, was chosen before COVID-19 was an issue. The research provided in support of mindfulness meditation only dealt with common healthcare stressors and not a pandemic that may or may not have caused inflation of some statistical numbers within the project.

The project offers a potential strategy for healthcare workers to utilize for staff members suffering from nurse burnout. When registered nurses are given education on specific topics and tools to combat an issue, in this case, burnout, they can be better equipped to deal with this problem.

Correlation of the Findings With Published Literature

Although research has shown the correlation between the MBI and nurse burnout, there has been limited research on the utilization of mindfulness meditation with registered nurses in the intensive care unit. The findings for this project showed a positive decrease in burnout scores for the participants within this study, providing evidence that the participants' burnout scores improved with the utilization of mindfulness meditation. Exercises were created and used to promote psychological health and reduce stress by Alfred James (2020). The mindfulness exercises created by Alfred James, the founder of Pocketmindfulness.com, have continued to be implemented throughout the years and continue to improve programs explicitly designed to reduce stress and burnout. In relation to the numbers provided within this project, it is evident that mindfulness meditation does, in fact, help reduce burnout. Another study showed mindfulness meditation has become an evidence-based stress reduction program (Jacobs et al.,

2017). The success of mindfulness meditation has led to an increase in research and helped the intervention prosper over 30 years and has supported the recovery between health and psychological outcomes (Jamieson & Tuckey, 2017). The numbers shown in the posttest support the previous statement. Overall, the findings within this project correlate with the numerous research articles provided.

Implications of Analysis for Leaders

The important concepts highlighted in the project aimed to show the participants that their willingness to engage in the project was the key to change and growth to combat burnout. The results of the study show that educational approaches to a potentially hazardous disease, such as burnout, can be combated to help decrease burnout or keep the disease from getting worse.

Combating burnout before it renders the individual incapable of correcting the underlying causes can help improve nurses' understanding of the disease and help them handle the disease with the right tools. Acknowledging and helping implement programs to combat burnout can lead to improved staff morale, improved patient care, and a decrease in the turnover of staff (Bong, 2019). Nurses must be open to empowering themselves with tools provided to combat burnout because if the nurses are not engaged, then all tools in this project will remain stagnant.

Nurses must view themselves as individuals and leaders of their own psychological and physiological well-being. When nurses understand their full potential as individuals, they will be able to combat nurse burnout with the tools provided in this project. If nurses are unable to take charge of their psychological well-being, burnout will increase and result in unwanted foreseen complications. Helping nurses understand their full leadership potential can make way for strong interventional programs to improve the workplace environment and patient care (Bong, 2019).

Essentials of Doctoral Education for Advanced Practice Nurses

Sheila Davis' (2018) work entitled, *Application of the Essentials to Advanced Nursing Practice*, provided guidelines as to how this DNP project should be structured to meet the needs of contemporary practice. Eight essential guidelines for DNP education, practice, and policy are described below.

Essential I: Scientific Underpinnings for Practice

Combating nurse burnout is a never-ending battle between healthcare workers and the disease. It is important to understand that nurse burnout can only be managed and corrected if the participant is willing to change and implement interventions willingly. Nola Pender's (2011) HPM, combined with mindfulness meditation, shows that registered nurses function as holistic beings. When one portion of their being is affected, it can ultimately cause detrimental effects to their job and patients (Vanajan et al., 2020).

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

Encouraging and sustaining change in registered nurses requires a homeostasis groundwork for the registered nurse. Caring for the registered nurse's physical and psychological well-being while they are still caring for their patients can be managed through Nola Pender's (2011) HPM. Through the use of the HPM, the nurse will understand the importance of caring for themselves to ensure the care they render to their patients is satisfactory. When the nurse is able to strengthen their psychological and physiological well-being, the nurse will be able to better the care of their patients, as well as decrease unwanted or unintentional harm as a result of burnout (Bong, 2019).

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

Registered nurses are accountable for continuing the quality of care for patients and their safety by researching, understanding at a deeper level, and implementing best practices. This project incorporating mindfulness meditation for nurse burnout provided quantitative research-based results that showed the correlation of evidence-based practice and the importance of improving nurses' psychological and physiological well-being. The published literature used in this project showed the importance of combating nurse burnout. Although the sample size was small and small sample sizes are often an issue in determining the significance of a study, this should not negate the benefits of mindfulness meditation that were presented in this project.

Essential IV: Information Systems and Technology and Patient Care Technology for Improvement and Transformation of Health Care

This study had the nurse participants utilizing technology to complete their portions. This project offered the opportunity for participants to utilize their technology innovations, evaluate their own burnout scores online, and understand how their scores affect ethical issues in the healthcare system (Davis, 2018). Also, Iused technology by utilizing an online database to implement the MBI and create an online educational presentation. A sample of the online meetings is included in Appendix K.

Essential V: Health Care Policy for Advocacy in Health Care

Nurses are the front runners of hospital establishments. Without them, the patient floors would not function the way they currently do. It is imperative that nurse burnout remains the front focus, and the registered nurses at risk of falling victim to the disease are advocated for to maintain physical and psychological homeostasis. The mindfulness meditation for nurse burnout project for the registered nurses in the intensive care unit required strong advocacy, as well as the

involvement of stakeholders, evidence-based practice articles and research, and social distancing policies to bring this project to fruition. In relation to burnout being an issue within the facility where the project took place, a new policy was implemented through an Onsite and Virtual Mental Health Resource program to help confront this problem.

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

The interprofessional collaboration for improving patient and population health outcomes began with a strong foundation. The importance of working from a strong foundation is essential in projects aimed to better patient care when multiple individuals are involved. This strong foundation must include solid communication, a strong start to finish plan, and a strong understanding of stakeholder roles (Safapour et al., 2019). The project required strong communication, heavy scheduling demands, and effective time management. These requirements were maintained and managed by every stakeholder, from floor registered nurses to management, which proved the project to be beneficial and effective in combating nurse burnout.

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

Research has shown that combating and decreasing burnout can reduce health risks and illnesses (Bong, 2019). When the bedside care nurse is experiencing burnout, the safety and care of the patient declines, regardless of the nurse's self-awareness of burnout (Bong, 2019). In itself, burnout is a psychosocial disease that can impact the nurse suffering from it both physically and psychologically. Overall, national population health suffers when nurses are experiencing burnout due to a lack of attentiveness, attention to detail, and compassion (Brown et al., 2018). When nurse burnout is recognized and addressed by healthcare leadership,

corrections can be made to ensure the standards of care are elevated to the highest healthcare standard across the nation.

Essential VIII: Advanced Nursing Practice

The project's focus was three-dimensional. The primary focus was the proper procedures of conducting a comprehensive needs assessment utilizing the MBI-HSS MP. The secondary focus, yet vital to the project, involved teamwork where participants were mentored and educated on burnout and effective mindfulness meditation to combat their recognized scores. The third layer focused on the participants who were guided through complex situational transitions after they were made aware of their burnout scores and thus successfully implemented their newfound skills with mindfulness meditation to combat nurse burnout.

Recommendations for Future Research

COVID-19 spread to the United States in 2019, and many people showed symptoms of depression, fatigue, and anxiety (Price, 2020). Among the individuals who experienced first-hand COVID-19 and its detriments were registered nurses. These floor nurses became the first responders and were pushed into a challenging and stressful working environment, which caused an increase in the symptoms of nurse burnout. Due to the overwhelming observations of nurse burnout, this project was developed to combat nurse burnout by giving nurses an educational intervention on nurse burnout and mindfulness meditation. This project is the foundation of nurses experiencing burnout but lacks the longevity data due to the proposal coming before the pandemic. Further recommendations include taking into consideration the pandemic that is currently taking place and furthering the statistical results by conducting or replicating this project with the pandemic in the front. Another recommendation is to incorporate a PTSD survey to further evaluate whether the floor nurses are experiencing burnout or PTSD. By further

conducting these two recommendations, a valid determination will be derived to distinguish between nurses experiencing burnout, PTSD, or both.

Chapter Summary

Nurse burnout is a silent epidemic that was recently recognized by the WHO as a psychological and physiological disease (Kumar, 2019). In the next 5 years, there will be a severe nursing shortage, partially because of anxiety, sleep deprivation, fatigue, and burnout (Brown et al., 2018). Nurse burnout is a disease that can plague the nation and cause emotional deterioration, nurse staffing shortages, increased financial loss, and, most of all, issues with patient safety (Dyrbye et al., 2019). This project highlighted the importance of addressing nurse burnout by using mindfulness meditation as an interventional tool to combat the disease and provided statistical data on the interventional tool's effect on registered nurses working in an intensive care unit. The literature review, along with the project outcomes, showed that mindfulness meditation is a validated tool that can be used to help combat nurse burnout. Although it is unclear whether the current COVID-19 pandemic had any effect on the statistical data shown in this project, the posttest scores and significant findings should not be dismissed and must be built upon in future research.

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Appendix A: Letter to Participants

Nurse Burnout

Participants Wanted

- **Who**
  - Looking for nurses with 1+ year experience
- **When**
  - Mid May
- **What**
  - This is a nurse burnout project.
  - Nurses will be asked to fill out an online burnout survey (link will be sent to participants email).
  - Scores will be given to nurses one on one and provided with explanation.
  - Nurses will then be asked to participate in a mindfulness meditation workshop (food and drinks will be provided).
  - Nurses will be asked to use mindfulness medication in their work setting for 8 weeks.
  - After the 8-week implementation nurses will retake the burnout survey and new scores will be provided
- Side note
  - This is on a volunteer basis. All nurses will be asked to fill out survey and attend course without pay (Food and snacks will be provided).

Burnout is a leading cause of turnover, poor patient care, and the deterioration of nurses' psychological and physiological well-being (Molina et al., 2018).

Appendix B: Burnout Flyer

Feeling burnt out?
Want to measure your burnt out percentage and see where you stand?

Get involved in a study aimed to reduce burnout syndrome
Using mindfulness meditation

In just 8-weeks, this course could reduce your burnout symptoms and improve your psychological well-being

Appendix C: Sample of Handout

Mindfulness Meditation
for
Nurse Burnout

What is Nurse Burnout

What is Mindfulness Meditation?

Appendix D: Survey Example

Appendix 2: Review Copy: MBI-HSS for Medical Personnel

MBI-HSS for Medical Personnel

Christina Maslach & Susan E. Jackson

The purpose of this survey is to discover how various persons in the human services or helping professions view their job and the people with whom they work closely.

Instructions: On the following pages are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about *your* job. If you have *never* had this feeling, write the number "0" (zero) in the space before the statement. If you have had this feeling, indicate *how often* you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below.

Example:

How often:	**0**	**1**	**2**	**3**	**4**	**5**	**6**
	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

How often 0-6	**Statement:**
1. _____	I feel depressed at work.

If you never feel depressed at work, you would write the number "0" (zero) under the heading "How often." If you rarely feel depressed at work (a few times a year or less), you would write the number "1." If your feelings of depression are fairly frequent (a few times a week but not daily), you would write the number "5."

Appendix E: Pocket Mindfulness Permission Letter

Mindful Copyright

I have decided to share my work using what I call “mindful copyright” to allow people to use it freely.

This allows schools, meditation retreats, medical initiatives, MBSR courses and anyone else to share my work without contractual hinderance.

How to quote my work:

You have my absolute permission to quote my work, wherever you like. You don't need to email me or contact a publisher; just go ahead and share as you like.

– If you want to quote my work in your own book, you don't need to pay me.

– If you want to use my work in the workplace; for a presentation, meditation exercise or part of a therapy course, you don't need to ask, even if you are making money.

– If you want to use my words in a film or documentary, you don't need my permission.

I do, however, ask kindly that you accredit the work to me by providing a link back to my website or by referencing my name.

My mission is to put mindfulness in the pockets of as many people as I can, and by giving me a mention when using my words, you are helping do just that.

Sharing my books:

You have my permission to share my books with your colleagues, friends and family.

Don't worry, I won't be chasing you down under piracy laws.

Of course, I'd prefer people to buy my books. After all, it helps fund my writing, my website and a coffee or two at the cafe. But giving you permission to share with a friend isn't going to prevent me continuing my tiny contribution to the literary world, and it helps me reach many more people.

So go ahead. Quote, share and spread the knowledge without my permission, and if possible, with a little credit.

Thank you for your support.

Alfred.

Appendix F: Health Promotion Model Permission Letter

Dear Jannelle:

You have my permission to use the Health Promotion Model and related instruments. Please see the attachment (Deep Blue site) for information about the model, etc.

Nola Pender

HEALTH PROMOTION MODEL

Developed By

Dr. Nola J. Pender

If you need information about the research, research instruments, and writings of Dr. Nola Pender and colleagues related to the Health Promotion Model (HPM), please see the following website:

https://deepblue.lib.umich.edu

Click on "Deep Blue Documents"

Under Browse by Click on "Authors"

At top of next screen by Or enter first few letters Enter 'Pender"

In list that appears, Click on Pender, Nola J.

Seventeen documents are there for your review and use.

Dr. Pender talks about her life's work on the video, Nurse Theorists – Portraits of Excellence, Volume II (2008). Go to http://www.fitne.net Click on Products, Click on Videos. As a student or faculty, you can order access to the video- Dr. Nola Pender – Health Promotion (NT2 NP-V-90) for $25. Your school can also subscribe to the entire video series of nurse theorists for either one year or two years.

Brief information about Dr. Pender's educational background and professional work, as well as, classic articles, presentations and awards can be found on the following website:

http://nursing.umich.edu/faculty-staff/nola-j-pender

For full vita, contact Dr. Pender at npender@umich.edu For current articles on the use of the Health Promotion Model, please see data bases such as CINAHL, Medline, PubMed, Dissertation Abstracts, etc.

Thank you for your interest in my work as well as that of my colleagues. We are pleased that you find the Health Promotion Model a useful tool in your efforts to promote the health and well-being of individuals and families as well as a meaningful framework for research in health promotion. Nurses can be transformational leaders in creating a "Culture of Health" in the United States and globally.

Wishing you good health,

Nola J. Pender, PhD, RN, FAAN (LL)

Professor Emerita

University of Michigan School of Nursing

Past Distinguished Professor

Loyola University Chicago

Past President and Living Legend

American Academy of Nursing

Appendix G: Permission to use Maslach Burnout Inventory Model

For use by Jannelle Sanchez only. Received from Mind Garden, Inc. on February 28, 2020

Permission for Jannelle Sanchez to reproduce 1 copy within one year of February 28, 2020

For Publications:

We understand situations exist where you may want sample test questions for various fair use situations such as academic, scientific or commentary purposes. No items from this instrument may be included in any publication without the prior express written permission from Mind Garden, Inc. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

For Dissertation and Thesis Appendices:

You may not include an entire instrument in your thesis or dissertation, however you may use the three sample items specified by Mind Garden. Academic committees understand the requirements of copyright and are satisfied with sample items for appendices and tables. For customers needing permission to reproduce the three sample items in a thesis or dissertation, the following page includes the permission letter and reference information needed to satisfy the requirements of an academic committee.

Online Use of Mind Garden Instruments:

Online administration and scoring of the Maslach Burnout Inventory is available from Mind Garden, (https://www.mindgarden.com/117-maslach-burnout-inventory). Mind Garden provides services to add items and demographics to the Maslach Burnout Inventory. Reports are available for the Maslach Burnout Inventory.

If your research uses an online survey platform other than the Mind Garden Transform survey system, you will need to meet Mind Garden's requirements by following the procedure described at mindgarden.com/mind-garden-forms/58-remote-online-use- application.html.

All Other Special Reproductions:

For any other special purposes requiring permissions for reproduction of this instrument, please contact info@mindgarden.com.

Appendix H: Licensure Purchase and Example Questions

www.mindgarden.com

To Whom It May Concern,

The above-named person has made a license purchase from Mind Garden, Inc. and has permission to administer the following copyrighted instrument up to that quantity purchased:

Maslach Burnout Inventory forms: Human Services Survey, Human Services Survey for Medical Personnel, Educators Survey, General Survey, or General Survey for Students.

The three sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument form may not be included or reproduced at any time in any other published material.

Citation of the instrument must include the applicable copyright statement listed below.
Sample Items:

MBI - Human Services Survey for Medical Personnel - MBI-HSS (MP): I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don't really care what happens to some patients.

Appendix I: Permission Letter from Hospital Facility

Jannelle Sanchez
Mon 12/30/2019 8:20 AM
Sent Items
To:
[redacted];
Hello again,
So my DNP project is similar to my Masters. It does not have to do with hours needing to be signed off or needing a mentor. My chair told me to ask if there was an IRB. If [redacted] does have one then I need to submit my proposal to them and to CNO for approval to move forward with my project. If not, then I just need to find volunteers from my understanding.
What it is about, again similar to the MSN project I did, would be about nurse burnout. I plan to have 10 nurses fill our a burnout survey and see where they score on the scale. Then using that, I plan to give these nurses an educational class (ppt not on company time) on what burnout is, their results, and ways to help decrease it. Then I plan to follow up in 4 weeks to see if making them aware of nurse burnout has helped in any way to decrease their percentage. No funds will be needed, all nurse info will remain confidential, no patients will be involved only nurses who fill out survey plus ICU/CCU clinical director and possibly [redacted]. I can provide you will all the paperwork from my school like I did with Phoenix, or anything you need.
Thank you
[redacted]
Mon 12/30/2019 8:45 AM
To:
Jannelle Sanchez;
You replied on 12/30/2019 10:28 AM.
Get more apps
Bing Maps
Action Items
Hi Janelle
[redacted] does not have an Institutional Review Board. This proposal would need approval from your [redacted]. It sounds like you will be asking for information from 10 of your
co workers in Critical Care and then having them attend an educational session.
If approved from [redacted], I will need to inquire if any documents would need to be signed by your co workers to take your survey and attend the educational session (non paid, not on work time). Please keep me informed of the final decision. Thank you.
[redacted]

Appendix J: Permission Letter from Assistant Clinical Director of Education

Jannelle Sanchez
Mon 12/30/2019 3:38 PM
Sent Items
To:
[redacted]
Hello [redacted]
Regarding my DNP project. I was told by [redacted] (education) that I have to get approval from you and my clinical director. [redacted] already said it was okay to proceed so now I am asking you. If you need me to explain what I'm trying to do in greater detail I can stop by the office sometime after the holidays.
Basically to make it short and simple:
I plan to do my project on nurse burnout (similar to my masters proposal) but this time include a nurse burnout survey (MBI- for human health services) to about 10 nurses (not on the clock and all volunteer basis) . Then after they take the survey I plan to give an educational course on the survey, burnout, health promotion model and an intervention tool "meditation" to help decrease their burnout scores. The nurses will then be able to use meditation for 4 weeks (at home, or on break) in hopes of decreasing burnout out. They will then have a follow up course and take the MBI survey again and evaluate if the meditation worked as evident by decrease in burnout percentage. Again, all this will be volunteer basis, not on work time / salary, all nurse info will be kept confidential, and there will be NO patient involvement. Please let me know if this will be okay to get started on. Implementation will not take place until mid next year.
Thank you,
Jannelle Sanchez ([redacted]

[redacted]
Tue 1/7/2020 12:48 PM
To:
Jannelle Sanchez;
Cc:
[redacted]
You replied on 1/8/2020 11:59 AM.
Get more apps
Action Items
Hello,
Absolutely! This is a wonderful study you are planning. Please be sure to share the results with me. I would love to understand what opportunities we may have to be able to prevent burnout.

Thank you,
[redacted]

Appendix K: Project Outline Week-at-a-Glance

Objective of the DNP Mindfulness Meditation Educational Project

1. Educate participants on knowledge of burnout, effects of disease, and mindfulness meditation
2. Educate participants on how to apply mindfulness meditation while are work
3. Provide support, without interventional assistance during implementation phase, to encourage adherence to project plan

Project Outline

Objective	**Content**	**Time Frame**	**Teaching Method**
Week 1; Objective 1,2	• Introduction to course • Explanation of pre-test results, educational course on burnout, mindfulness meditation, and what to expect in the weeks to come. • Questions and feedback	4	In person PowerPoint Handouts
Objective 3	• Week 2 • Week 3 • Week 4 • Week 5 • Week 6 • Week 7	Varies	In person Text messages Emails
Measurement 1,2	• Week 8 • Measure by survey • One on one sessions	• 4 hours for Post-course • 1 hour per participant	In Person
Objective	**Content**	**Time Frame**	**Teaching Method**