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Self-Care and Burnout among Nurses in a Hospital Setting

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Table of Contents

Abstract

Rates of burnout among healthcare professionals are well documented. The burnout of professional nurses is associated with a number of poor outcomes with costly consequences to both the healthcare system and public health. The American Nurses Association (ANA) has pushed for an initiative entitled Healthy Nurse Healthy Nation that encourages nurses to prioritize their health first and lists compelling statistics of nurse stress, mental health concerns, and workplace injuries. Burnout, a combination of emotional exhaustion, depersonalization, and decreased productivity, is one consequence of workplace stress and the demands placed on nurses; however, there is a lack of research on individualized wellness interventions, such as self-care, to prevent nurse burnout. This cross-sectional survey based study explores how nurses' individual self-care habits correlate with burnout in the hospital setting. Data from 136 nurses was collected from those employed in a hospital located in the southeastern United States. Nurses who reported a higher frequency of mindful awareness experienced significantly lower emotional exhaustion and increased sense of personal accomplishment. Mindfulness may be a cost-effective, simple tool for nurses to combat and prevent the effects of burnout.

Keywords: nursing, burnout, self-care, mindfulness

Self-Care and Burnout among Nurses in a Hospital Setting

Nurses experience some of the highest rates of burnout among health care professionals (Cañadas-De la Fuente et al., 2015). Burnout is defined as a mental and/or physical collapse due to do excessive job stress or frustration (Merriam-Webster, 2019). This is generally measured by three main constructs: emotional exhaustion, depersonalization, and decreased productivity in the workplace (Maslach, 2002; Maslach, Jackson, & Leiter, 2016; Weekes, 2014). In a healthcare context, nurses are responsible for monitoring and responding to urgent and competing needs of multiple individuals and their families. In addition, the standard twelve-hour shift dealing with the chaos of a rapidly changing healthcare environment including critically ill patients, increasing nurse-patient ratios, and increasing demands from employers, all contributes to the high rate of burnout within this profession (Karimyar & Hojat, 2014). For decades, burnout has had negative effects on the healthcare team and has been a major contributor to absenteeism, nurse turnover, and decreased patient satisfaction (Cañadas-De la Fuente et al., 2015; Manomenidis et al., 2017). Each of these consequences adversely impacts the health care system and influences the function of the health care team.

A key precursor to nurse burnout is workplace stress, which, in a study of 212 nurses, accounted for nearly 30% of called in sick days among healthcare workers and cost the system an estimated 300-400 million dollars per year (Karimyar & Hojat, 2014). Burnout and workplace stress directly contribute to a nurse turnover rate of more than 14% within the first five years of employment (Collini, Guidroz & Perez, 2015). High rates of nurse turnover result in chronic staff shortages, and the perpetual onboarding of novice nurses all of which create vulnerability and risk for burnout for working nurses while passing the risk of medical error on to the patients and their families. Each of these variables has costly consequences to both public and private

health systems. The American Organization of Nurse Executives conservatively estimates that the cost of hiring and training a nurse to a new position costs approximately $50,000 (American Federation of State, County, and Municipal Employees, 2018). With a national turnover rate of approximately 15% and 3.1 million nurses in the United States, the annual cost of turnover equates to $9.75 billion (American Federation of State, County, and Municipal Employees, 2018). With the costs of burnout to the health system, the nursing profession and US public health call for innovations to support the health and wellness of all professional nurses.

Self-care includes any activity or habit performed by the individual with the goal of maintaining or improving his/her physical, emotional, or spiritual health (Orem, 2001). Many positive self-care activities not only target daily management of health, but also focus on long-term stress reduction. Stress reduction is one of the most effective ways to reduce the risk for burnout in the health care profession, as an overabundance of workplace stress is the driving factor of burnout development (Young, Duff, & Stanney, 2016). With burnout rates affecting nurse turnover, patient satisfaction, and the financial wedge of healthcare, emphasis should be placed on protecting nurses from burnout.

Recent health services research shows a trend of increasing incidence and high prevalence of burnout among nurses. The well-documented risks of nurse burnout on the health care cost and quality make the prevention, early identification and evaluation on strategies to reduce and prevent burnout a priority. Much of today's literature focuses on system level changes as an intervention to affect burnout such as staffing ratios, financial initiatives, and collaborative practice initiatives; however, literature targeting wellness interventions is less robust. Positive self-care has been shown to have reassuring effects on burnout rates among professions in fields such as social work, psychology, and business (Manomenidis, 2017; Orem, 2001; Weekes,

2014). In addition, self-care habits have had positive results in terms of reducing stress, anxiety, sleep disorder symptoms, and physical pain, all of which affect the nursing population (Karimyar Jahromi, & Hojat, 2014; Weekes, 2014). This study aims to examine the relationship between nurses' self-care habits and burnout. This study aims to examine the relationship between nurses' self-care habits and burnout.

Purpose

The purpose of this project is to determine how nurses' individual self-care habits are correlated with professional burnout among nurses employed in a hospital setting. Self-care will be examined in multiple domains (physical care, supportive relationships, mindful awareness, self-compassion and purpose, mindful relaxation, and supportive structure) to illuminate which domains of self-care might be protective against nurse burnout.

Research Questions

Research Question 1

Are specific domains of self-care (physical care, supportive relationships, mindful awareness, self-compassion and purpose, mindful relaxation, and supportive structure) correlated with lower reported burnout scores among nurses in a hospital setting?

Null hypothesis *(H_{01}).* There is no statistically significant relationship between the domains of self-care and lower reported burnout scores among nurses in a hospital setting.

Alternative hypothesis (H_{a1}). There is a statistically significant relationship between the domain of self-care and lower reported burnout scores among nurses in a hospital setting.

Research Question 2

Is there a relationship between frequency of self-care and lower reported burnout among nurses working in a hospital setting?

Null hypothesis (H_{02}). There is no statistically significant relationship between frequency of self-care and lower reported burnout among nurses working in a hospital setting.

Alternative hypothesis (H_{a2}). There is a statistically significant relationship between nurses who perform a higher frequency of self-care and lower reported burnout among nurses working in a hospital setting.

Summary

These research questions aim to examine the relationship between types of self-care and burnout. This project could potentially impact the way nurses care for themselves away from the workplace and could improve nurse turnover, patient satisfaction, and the burnout rates among nurses. The information could also aid hospital management and administration in providing workplace solutions to burnout such as education, incentives, availability of self-care needs, supportive culture, and other opportunities to encourage nurses in their prioritization of self-care as foundational to their work as professional caregivers.

Review of Evidence

Burnout

Burnout has been recognized for decades as a problem faced by many of those employed in stressful environments (Maslach, Jackson, & Leiter, 2016). This construct has been well researched in fields including nursing, college students, psychology, sociology, medicine, and others (Maslach, Jackson, & Leiter, 2016; Weekes, 2014). At this time, much of the current literature focuses on system wide interventions to reduce burnout including shorter workdays, new management styles and support, and increased financial compensation; however, less research is available on wellness interventions as a potential tool against burnout in the nursing

profession (Russell, 2016; Young, Duff, & Stanney, 2016). With burnout affecting all aspects of the nursing occupation, managing burnout daily is still a challenge.

Burnout is generally measured by three main components: emotional exhaustion, depersonalization, and decreased productivity (Maslach, Jackson, & Leiter, 2016). Emotional exhaustion is a feeling of depleting one's emotional resources where a worker may feel he/she is no longer able to give of himself to a patient or client (Maslach, Jackson, & Leiter, 1986). Emotional exhaustion is oftentimes linked to depersonalization as two correlated components of burnout (Maslach, Jackson, & Leiter, 1986). Depersonalization involves feelings of cynicism or negativity towards patients or clients (Maslach, Jackson, & Leiter, 1986). This can lead to a dehumanized view of patients in one's care and can even evolve to feeling that a patient's illness or struggles are deserved (Ryan, 1971). Third, decreased personal accomplishment is a symptom of burnout. This involves an individual negatively evaluating his/her work accomplishments or feeling unhappy with his/her productivity (Maslach, Jackson, & Leiter, 1986).

Nurse Health

According to The Bureau of Labor Statistics (2017), there are three million registered nurses in the United States making this the largest group of health professionals in the country. As the largest health care professional group, nurses experience high rates of stress, a key precursor to burnout. The American Nurses Association (ANA) surveyed 14,000 nurses between 2013-2016 as part of the "Healthy Nurse, Healthy Nation" initiative (ANA, 2017). In the ANA's report, 82% of nurses surveyed reported significant levels of workplace stress, making this the top workplace environmental health and safety risk for nurses (ANA, 2017). In addition, 33% reported heavy workloads and patient care assignments that made them uncomfortable, placing them at greater risk of excessive workplace stress (ANA, 2016). The acknowledgement of the

declining health among nurses inspired the ANA to make 2017 the year of the healthy nurse aiming to improve the physical, emotional, and mental health of nurses across the nation (ANA, 2016).

Burnout is well known to have result in on the individual's health and well being (Maslach, 2002; Weekes, 2014). Since the 1950s, nursing has noted workplace stress as a serious occupational hazard (Jennings, 2008). Inherently the nursing role has been perceived as stressful due to the physical labor of the role, the constant exposure to human suffering, the standard 12-hour workdays, staffing ratios, and the interpersonal interaction with patients and family members which is central to the success of the nursing profession (Jennings, 2008). Since the 1980s, the workplace stress suffered by the nursing profession has escalated due to the mounting demands placed on nurses, the increased use of technology, the rising costs of health care, and the growing demands placed on nurses within the healthcare environment (Jennings, 2007). The American Nurses Association (2017) notes that stress and work shift demands have contributed to the deteriorating physical and mental health of nurses in the United States. In fact, the ANA (2016) notes that nearly one in five nurses suffer from depression with an increasing number of nurses showing symptoms of secondary traumatic stress. In a literature review of nurse burnout and health complaints, nurses who reported higher levels of burnout also reported adverse perceived health effects including headaches, anxiety, and symptoms of mental distress (Khamisa, Peltzer, & Oldenburg, 2013). In addition, this review linked nurse burnout to the increasing presence of anxiety and depression (Khamisa, Peltzer, & Oldenburg, 2013).

Patient Safety

As nurses' individual physical, mental, and emotional health falters with the presence of burnout, patient satisfaction and safety is also compromised. In a survey of 17,965 nurses, those

who reported higher levels of burnout were correlated to decreased patient satisfaction (Laschinger & Leiter, 2006). In addition, those who reported increased levels of burnout also reported that they were more likely to offer care that was less than what the patient and family deserved (Laschinger & Leiter, 2006). A study that surveyed nurses working in a Veteran's Administration (VA) hospital noted that nurses who reported higher levels of burnout also recounted higher frequencies of patient care mistakes (Halbesleben et al., 2008). This same study highlighted that burnout was correlated with lower perceived patient safety outcomes (Halbesleben, 2008). Burnout in the nursing profession not only adversely affects the physical, mental, and emotional health of the nurse, but it also risks the safety of the patients under nursing care.

The Cost of Burnout

Burnout in the nursing profession leads to a financial strain on the healthcare system. The American Organization of Nurse Executives notes that the conservative expense to recruit, hire, and train one nurse is approximately $50,000 (American Federation of State, County, and Municipal Employees, 2018). With a national nurse turnover rate of approximately 15%, this cost equates to roughly $9.75 billion per year spent on hiring nurses across the nation (American Federation of State, County, and Municipal Employees, 2018). A study of 667 nurses revealed that burnout influenced nurses' intentions to leave their current employment (Leiter & Maslach, 2009). Another study of 283 nurses linked a significant connection between workplace stress and burnout with turnover intention (Yoon & Souk-Young, 2010). In fact, stressful environments such as the emergency department turnover their entire nursing staff on average every five years (Nursing Solutions, Inc., 2018).

In addition to turnover, nurse burnout is contributing to the expensive national nurse labor shortage. According to Nursing Solutions, Inc.'s 2018 National Health Care Retention and RN Staffing Report, which surveyed over 126 healthcare facilities nationwide representing approximately 100,000 registered nurses, it takes approximately 53-108 days to hire an experienced nurse to fill a vacant position (National Solutions Inc., 2018). This cyclical action of increased nurse turnover combined with the lengthy process of hiring a new nurse leaves the remaining nurses vulnerable to increasing patient demands and nurse-patient ratios. It is projected that by 2020, the United States will have approximately 808,000 registered nurse positions unfilled due to a lack of trained nurses (Paul & MacDonald, 2014). Increased staffing ratios and short staffing in terms of registered nurses has a direct link to decreased patient satisfaction, increased patient safety concerns, and increased patient mortality rate (Aiken et al., 2002; Stanton, 2004). With burnout and turnover influencing the financial burden of the health care system as well as the nursing shortage, prevention and management of nurse burnout should remain a priority for the health care system.

Self-Care

Self-care refers to actions that reduce stressors and improve physical, emotional, and spiritual health (Orem, 2001; Weekes, 2014). Self-care involves a daily process of awareness of one's basic physiologic and emotional needs and then acting to fulfill them (Cook-Cottone & Guyker, 2017). Positive self-care habits have been shown to target stress, increase job satisfaction, and improve physical health (Manomenidis, 2017; Orem, 2001; Weekes, 2014). Many of the benefits of self-care counteract the symptoms of nurse burnout.

Forms of Self-Care.

Self-care habits are highly individualized and can be targeted to best fit a person's unique schedule, interests, financial limitations, and greatest areas of need (Dean, 1989). Self-care is a form of health-maintenance behavior (Dean, 1989). Therefore, self-care habits can be targeted to improve or maintain different aspects of an individual's well being. Techniques can be categorized among many different domains including, but not limited to, physical self-care, supportive relationships, mindful awareness, self-compassion and purpose, mindful relaxation, and supportive structure (Cook-Cottone & Guyker, 2017). These domains of self-care mirror the framework of the Mindful Self Care Scale – SHORT that will guide the self-care assessment of this study.

Physical self-care.

Physical self-care refers to the habits that support a healthy physical body such as sleeping an appropriate amount, hydrating properly, exercising, and eating nutritious meals (Cook-Cottone & Guyker, 2017).

Supportive relationships.

Another form of self-care includes developing supportive relationships. This embraces planning and prioritizing time with people who offer support and encouragement (Cook-Cottone & Guyker, 2017). A supportive relationship involves forming and maintaining a contact with someone who respects boundaries, offers help, and listens to concerns or struggles (Cook-Cottone & Guyker, 2017).

Supportive structure.

Supportive structure is an equally important domain of self-care. This prioritizes a manageable schedule that balances the demands of others (school, work, family) against what is important to the individual (Cook-Cottone & Guyker, 2017). Another aspect of supportive

structure involves the physical environment. This encompasses the maintenance of a comfortable living environment as well as an organized work area (Cook-Cottone & Guyker, 2017).

Self-compassion and purpose.

Self-compassion involves extending oneself empathy and kindness in times of hardship, suffering, of failure (Neff, 2003). Self-compassion focuses on understanding the human experience as one of success and happiness as well as suffering (Neff, 2003). Avoiding overly harsh self-criticism and self-judgment while acknowledging negative feelings are key components of self-compassion (Neff, 2003). Purpose refers to experiencing a larger meaning in all aspects of one's work, private, and personal life (Cook-Cottone & Guyker, 2017).

Mindful self-care.

Mindful self-care utilizes mindfulness as an added component to self-care (Cook-Cottone & Guyker, 2017). Mindfulness is the purposeful intention of being alert in the present moment with a nonjudgmental purpose (Kabat-Zinn, 1994). Although the term was originally tied to religions such as Buddhism, mindfulness is now widely accepted as an innate feature of human consciousness unrelated to religion (Black, 2011). Mindful self-care strategies are seen as essential to achieving both physical and emotional health (Cook-Cottone & Guyker, 2017). Mindful self-care habits, when practiced intentionally and regularly, are protective against mental health symptoms, burnout, and are thought to support productivity (Cook-Cottone & Guyker, 2017).

Mindful awareness.

Mindful awareness is a form of mindfulness-based self-care that involves purposeful recognition of one's thoughts, feelings, and body (Cook-Cottone & Guyker, 2017). This also

comprises the ability to intentionally choose which thoughts and feelings will guide actions (Cook-Cottone & Guyker, 2017).

Mindful relaxation.

Mindful relaxation is another self-care domain that applies mindfulness. Techniques in this self-care category focus on seeking out interpersonal, intellectual, and environmental activities or items that promote relaxation (Cook-Cottone & Guyker, 2017). This includes strategies such as reading a book, playing an instrument, listening to music, watching a film, embracing comforting scents, as well as other forms of relaxation (Cook-Cottone & Guyker, 2017).

Self-care among helping professions.

Self-care promotes the health of all aspects of the individual and can be targeted to support different needs (Cook-Cottone, 2015). Self-care among helping professions has been shown to be particularly necessary. Richards et al. (2010) notes that self-care enhances well-being and should be done among the domains of physical, psychological, spiritual, personal, and professional support. In addition, since health professionals are increasingly susceptible to burnout, which can impair clinical work, self-care has been suggested as an ethical obligation among helping professions in order to offer quality services (Richards et al., 2010).

Specific to the nursing profession, the American Nurses Association notes that a healthy nurse is one who fulfills his/her personal health, safety, and wellness to the fullest capacity (ANA, 2017). Given that self-care promotes a healthy mind, body, and spirit, self-care habits make a promising intervention to reducing or minimizing the effects of burnout

Theoretical Model

There are two theories guiding this study: Orem's theory of self-care and the multidimensional theory of burnout. Orem's theory defines self-care as an action performed by the individual for the maintenance of his/her well being (Orem, 2001). Self-care should be individualized to meet each patient's health status, health goals, and stage of development (Orem, 2001). Orem (2001) describes multiple factors that influence one's self-care capacity including age, gender, health status, socioeconomic status, occupation, and others. Orem (2001) further divides the construct into internal and external orientations. Internal orientations include thoughts and feelings whereas external self-care orientations involve actions during an individual's interaction with the environment and other people (Orem, 2001). Maintaining a balance between both external and internal orientations, or how one feels within oneself and how that individual interacts with the environment, is vital to obtaining and sustaining an ideal health status (Orem, 2001).

The goal of self-care is to balance the impact of daily stressors with activities that promote relaxation and restoration of an individual's mind, body, and/or spirit (Weekes, 2014). Orem (2001) states that those who engage in routine self-care tasks are better able to achieve this balance; by optimizing health in the physical, spiritual, and emotional domains, individuals improve their capacity to manage the stressors of daily life (Orem, 2001). However, when the balance between self-care demands and self-care capacity falters, nursing care is necessary to fulfill the self-care needs of the individual (Orem, 2001).

Orem's (2001) theory centers on the notion that when the individual's self-care demands and self-care capacity are unbalanced, nurses must step in and provide the self-care capacity that is necessary to maintain the individual's health status. Nurses are trained to offer interventions

targeting the physical, spiritual, and emotional domains of self-care, and can individualize the interventions based on the specific shortcomings of the patient's self-care capacity (Orem, 2001). If the self-care demands and self-care capacity remain unbalanced, the individual's well-being and capacity to manage stress is at risk (Orem, 2001).

The second theory that guides the framework of this study is the multidimensional theory of burnout. Maslach (2002) reports that job burnout results from three key dimensions: emotional exhaustion, depersonalization, and personal accomplishment. The multidimensional theory of burnout approaches the problem of burnout from three main vantage points: emotional exhaustion (the feeling of being overworked and depleted of emotion), depersonalization (involves a cynical view of work and a detached response to people), and reduced personal accomplishment (feelings of failure and reduced productivity in the workplace) (Maslach, 2002). These three components converge to form an individual stress experience within a social context (Maslach, 2002). This theory suggests that when individuals are at high risk for burnout when they meet increased work demands (stress, work overload, personal conflicts) with depleted resources (coping, social support) (Maslach, 2002). Further, individuals who experience burnout enter a cycle of absenteeism, physical illness, and ultimately, turnover (Maslach, 2002). Conversely, when the same stressors are met with positive resources and the individual successfully manages demands and maintains balance, that individual is better able to fulfill his/her human needs and work commitment resulting in an optimal body, mind, and spirit (Orem, 2001). This balance of self-fulfillment promotes commitment to one's job, improved job satisfaction, and a sense of accomplishment in the workplace (Maslach, 2002). See Figure 1 for a graphic depiction of this cycle.

Both the theory of self-care and the multidimensional theory of burnout compliment this project focus by acknowledging both of the major constructs (burnout and self-care) as well as how self-care, self-care deficit, and risk for burnout are a cyclical interaction that can be broken by improving the individual's self-care habits as an effort to reduce workplace stress and improve a sustainable work-life balance.

Project Design

This cross-sectional survey based study was aimed at understanding the correlation between self-care habits and burnout among nurses in a hospital setting. Baseline burnout in a cohort of professional nurses was measured and, additionally, the relationship between self-care habits and burnout was explored. Verification of exemption was obtained through the Belmont University Institutional Review Board (IRB).

Clinical Setting

This study was implemented at a hospital in the southeastern United States. This location employs approximately 410 nurses working in various units including emergency services, pediatrics, general surgery, medical/surgical care, telemetry, geriatrics, cardiac care, and others. In addition, the hospital offers flexible employment options for nurses including full-time, part-time, as needed (PRN), and weekend options. With the flexibility of employment and variety of nursing opportunities, this hospital attracts employees from multiple neighboring counties. This location provided an opportunity to draw data from a broad and diverse population of professional nurses.

Project Population

A convenience sampling strategy was used to recruit a sample of professional nurses currently employed at a community hospital in the southeast. This population includes nurses

from a variety of different backgrounds, experience levels, education levels, and lifestyles. All nurses employed by the hospital who were involved with direct patient care were eligible to participate in the study. An email was sent from nursing directors to a list of staff nurses' work emails which included a letter of invitation and a link to the web-based survey.

This letter also served as the implied consent for the study. The email contained a hyperlink that opened directly onto the online survey. Data was collected for six weeks during the months of October and November in 2018. In addition, each week during data collection, reminder emails were sent from each unit director to the nurses that encouraged participation in the voluntary study.

Data Collection Instruments

Maslach Burnout Inventory – Human Services Survey for Medical Professionals.

Nurse burnout was measured using the Maslach Burnout Inventory Human Services Survey for Medical Professionals (MBI-HSS (MP)). The MBI-HSS (MP) is the leading measure for burnout and consists of three subscales that correspond to each of the three domains of burnout: emotional exhaustion (EE), depersonalization (DP), and personal accomplishment (PA) (Maslach, Jackson, & Leiter, 2016). The survey includes 22 questions with 7-point likert style responses that reflect how frequently a respondent has experienced different aspects of burnout: 0 equals "never" and 6 equals "daily" (Maslach, Jackson, & Leiter, 2016). The MBI-HSS (MP) takes approximately 10 minutes to complete (Maslach, Jackson, & Leiter, 2016). The MBI-HSS (MP), along with the instruction manual, was purchased through Mind Garden, Inc. along with the license to distribute the survey through electronic survey software. All required copyright information was provided to and approved by Mind Garden, Inc. prior to the distribution of the survey. See Appendix B for permission to use the tool.

The MBI-HSS (MP) has a detailed scoring procedure, which scores the subscales separately instead of providing one general burnout score. A higher score on the emotional exhaustion corresponds to a higher level of emotional exhaustion (Maslach, Jackson, & Leiter, 2016). This is similar to the depersonalization scale where a higher score indicates a more severe level of depersonalization (Maslach, Jackson, & Leiter, 2016). A higher score on the personal accomplishment scale, however, is a positive indication of a higher feeling of personal accomplishment (Maslach, Jackson, & Leiter, 2016). In general, one who reports a high emotional exhaustion score, high depersonalization score, and low personal accomplishment score is regarded as experiencing a higher level of burnout whereas, a generally lower EE score, lower DP score, and higher PA score is associated with minimal burnout (Maslach, Jackson, & Leiter, 2016).

Reliability and validity of the MBI-HSS (MP) has been consistently demonstrated. Coefficients of reliability are included in the Maslach Burnout Inventory Manual for each subscale including emotional exhaustion (0.90), depersonalization (0.79), and personal accomplishment (0.71) (Maslach, Jackson, & Leiter, 2016). All coefficients were statistically significant ($p < .001$) (Maslach, Jackson, & Leiter, 2016).

Mindful Self-Care Scale – SHORT.

The Mindful Self-Care Scale – SHORT (MSCS) was used as the measure of self-care within the study. The MSCS was developed to fill a gap in the limited tools available to measure self-care (Cook-Cottone, & Guyker, 2017). The survey consists of 33 questions with likert style responses that measure the frequency of self-care habits in six separate domains (Cook-Cottone & Guyker 2016). These domains include physical care, supportive relationships, mindful awareness, self-compassion and purpose, mindful relaxation, and supportive structure (Cook-

Cottone & Guyker, 2016). See Appendix A to see the MSCS within the survey that was sent out to the nurses.

The variety of self-care domains allow the survey to measure self-care habits from multiple vantage points including physical, mental, spiritual, and emotional. The MSCS has been found reliable and valid. Coefficients of reliability for each of the self-care domains are as follows: 0.89 for the total MSCS, physical care (0.87), supportive relationships (0.86), mindful awareness (0.94), self compassion and purpose (0.81), mindful relaxation (0.80), and supportive structure (0.72) (Maslach, Jackson, & Leiter, 2016). The validation of the MSCS revealed appropriate coefficients of reliability for each of the domains, all of which were significant (Cook-Cottone & Guyker, 2017).

Demographic questionnaire.

In addition to the MBI-HSS (MP) and the MSCS, the survey included a demographic form with eight questions related to known factors that influence nurse burnout including years of practice as a nurse, education level, shift time, and work commitment.

Self-reported health.

In addition to the short demographic survey, participants will answer one self-reported health question aimed at determining how each participant perceives his/her health. This single question will offer five options ranging from "poor" to "excellent." It is understood that those who self-report worse health in general have higher rates of burnout (Šolcová, Kebza, Kodl, & Kernová, 2017). In addition, self-reported health has known correlations to mortality rates, psychological distress, and overall physical health (Fayers & Hays, 2011). It has also been argued that every study that focused on work-related satisfaction and health include at least on self-reported health question (Fayers & Hays, 2011). See Appendix A for a copy of the survey.

Data Collection Process/Procedures

Survey development.

The electronic survey was developed using Qualtrics software. Since risks to participation were considered minimal, informed consent was waived and participants implied their consent to participate by completing and submitting the web-based survey. In addition, the survey included a condensed version of the letter of invitation reiterating the voluntary nature of the study and implied consent. Prior to distribution of the survey, the survey was piloted for flow, clarity, and estimated time burden in a group of seven doctor of nursing practice students and four nursing faculty, each of whom is also a professional nurse. This piloting revealed an estimated time of less than ten minutes to be proposed to the perspective participants and ensure that the time constraint did not deter prospective participants from completing the survey (Dillman, Smyth, & Christian, 2014). The survey was designed to allow participants to return to previous pages, to skip questions if they chose not to respond, and was devised to fit both computer screens and mobile devices. Each of these components aimed to reduce respondent fatigue and to encourage completion of the survey (Dillman, Smyth, & Christian, 2014).

Survey distribution.

Once the survey was developed and piloted, the survey hyperlink and QR code was sent through email to each of the unit directors by the main evaluator. Each director then forwarded the email containing the letter of invitation, the hyperlink, and the QR code to the survey to their nursing staff. This ensured the email came from someone each nurse was familiar with and from an email within the hospital system's database. It also allowed for an individualized message to be sent to each director and unit. This personalization can aid in a higher response rate (Dillman, Smyth, & Christian, 2014). In addition, allowing the choice of either the hyperlink to be used or

the QR code to be scanned to a smart device gave the participants more options to choose which method of survey they felt most comfortable completing. By distributing the survey with multiple methods of completion, it also aids in a higher response rate and acknowledges the varying familiarity of technology among the sample (Dillman, Smyth, & Christian, 2014).

The survey remained active for 6 weeks (October-November 2018) giving each interested participant ample time to complete his/her survey. In addition, each week the directors sent out a reminder email offering the hyperlink and QR code again to the nurses as well as a short offer to participate in the study. This reminder has been shown to increase response rates and encourage participants to complete his/her survey (Dillman, Smyth, & Christian, 2014). At the conclusion of the month, the survey was closed and one last email was sent to the nurses thanking them for their time.

Data access.

The data from the completed surveys was delivered to the Qualtrics website where the evaluator had access to it at all times. The data did not include any identifiable information. This enabled the tracking of how many responses were being obtained to ensure an adequate sample size was reached prior to the end of the data collection period. At the conclusion of the data collection, the completed survey data was exported to SPSS where data analysis took place.

Data cleaning.

Once the data collection period had ended and the survey data was exported to Excel. The data was cleaned of missing values. Six surveys had a 0% completion and were therefore removed from the data collection. The raw data also included 8 missing data points. In order to place a value in the missing data point, the average score for that question was placed within the

missing data point. Once the raw data was void of any missing data points, there remained 136 survey responses.

Statistical Analysis

Once data was cleaned, the data was transferred to IBM Statistical Packages for Social Sciences (SPSS) software for all statistical analysis. SPSS Version 25.0 was used to analysis. The analysis utilized an alpha level of 0.05 for all components. Descriptive statistics was used to assess demographic information and provide a baseline assessment of MBI–HSS (MP) and MSCS scores for the sample population. Spearman's correlation was conducted to assess the relationship between the MBI subscales and self-reported general health. To determine possible correlations between the MBI-HSS (MP) subscales and the MSCS domains of self-care, linear regression models were conducted.

Results

Sample Characteristics

A total of 136 nurses participated in this study indicating a total response rate near 30%. Sample characteristics including age, gender, race/ethnicity, years of nursing experience, highest level of education, type of employment, and type of unit employed are provided in Table 1. Of the 136 individuals, the majority were female (n=118) and identified as white (n=128). The average age of the nursing population was 39.4 with an average of 12.7 years of nursing experience. The study population was predominantly full time nurses (n=98) who worked day shift hours (n=91). The unit types offered within the survey were all represented in the sample with the emergency department (n=32) and medical/surgical and medical/telemetry (n=31) having the highest representation. The majority of the population held a Bachelor's degree (n=77) with an associate degree (n=54) being the second most common education level.

Self-reported general health

The average self-reported general score was 3.6 out of a possible 5 with a standard deviation of 0.8. This most common self-reported score was a 4 (“very good”) with 70 of the respondents choosing this option.

Burnout

Emotional exhaustion.

The highest score available on the emotional exhaustion subscale is 52 indicating the highest possible risk for emotional exhaustion. The average score of the 136 nurses in the population was 22.6 for the emotional exhaustion subscale with a standard deviation of 11.7. Of the 136, 18.4% scored in the uppermost third of the possible scores (34 or above).

Depersonalization.

The highest score possible on the depersonalization subscale of the MBI-HSS (MP) is 26 indicating the largest risk for depersonalization. In this population, the average depersonalization score was 9 with a standard deviation of 6.2. 11% of the 136 nurses responded in a way that placed their scores in the highest third of possible scores (17 or above).

Personal accomplishment.

The personal accomplishment subscale can range from 1-48 with the higher scores indicating an increased feeling of personal accomplishment in the workplace. In this population, the average personal accomplishment score was 37.5 with a standard deviation of 7.8. 1.5% of the nurses surveyed scored in the lowest third of scores possible (16 and below) while nearly 75% of respondents scored in the uppermost third (32 or above) indicating a high sense of personal accomplishment.

Self-care

Physical self-care.

The highest score of physical self-care indicating the highest level of regularity of physical self-care is 36 as one item is reverse-scored. In this population, the mean score was 19.5 with a standard deviation of 5.99. Both the median and the mode for this domain of self-care were 19.

Supportive relationships.

The highest frequency of supportive relationships as a domain of self-care is reflected in a score of 25. The average score was 22.3 with a standard deviation of 3.5. The average score indicates was the most frequently used self-care domain by the 136 nurses.

Mindful awareness.

The mindful awareness subscale within the MSCS – SHORT has a potential score of 20 corresponding to the highest frequency of mindful awareness. This population scored an average of 16.7 with a standard deviation of 3.8.

Self-compassion and purpose.

The highest score possible on the self-compassion and purpose subscale is 30. This group had an average score of 23 with a standard deviation of 5.8. A higher score on this subscale parallels to a higher frequency of self-compassion and purpose.

Mindful relaxation.

The mindful relaxation domain carries the possibility of a score of 30 indicating the highest frequency of mindful relaxation as a self-care habit. The 136 nurses who responded scored an average of 18.2 with a standard deviation of 5.6.

Supportive structure.

The score indicating the highest frequency of supportive structure is a 20. This population had an average score of 15.7 with a standard deviation of 3.4.

Self-Reported General Health and Burnout

Spearman's correlation was used to determine if there was a notable correlation between self-reported general health and the MBI-HSS (MP) subscales: emotional exhaustion, depersonalization, and personal accomplishment There was a statistically significant positive association between self-reported general health and personal accomplishment (r=0.192). This correlation indicates a positive relationship between higher self-reported general health scores and a higher score on the personal accomplishment MBI-HSS (MP) subscale. Table 2 for more detail on this correlation.

Self-Care and Burnout

Linear regression models were used to analyze the relationships between each of the self-care domains within the MSCS-SHORT and the three MBI-HSS (MP) subscales. The linear regression model between the MBI-HSS (MP) subscale of emotional exhaustion and the MSCS-SHORT resulted in an overall correlation with a significant level less than 0.000. Specifically, the mindful awareness domain of self-care showed a significant inverse relationship to the emotional exhaustion subscale (-.437). This mirrors the relationship of a higher frequency of mindful awareness self-care techniques corresponding to a lower emotional exhaustion score. In reference to the emotional exhaustion subscale, mindful awareness was the sole domain with a significant correlation.

When analyzing the MBI-HSS (MP) personal accomplishment subscale and the MSCS-SHORT domains, the mindful awareness self-care subscale resulted in a statistically significant positive correlation of 0.383. This indicates that, generally, nurses reporting a higher frequency

of mindful awareness also have higher scores of personal accomplishment. Mindful awareness was the sole self-care subscale with a significant correlation between personal accomplishment and the MSCS-SHORT domains. The linear regression model for the relationship between the depersonalization subscale and the self-care domains did not yield a significant result. Table 5 displays further information on these relationships.

Discussion

Self-Care and Burnout

Mindful awareness showed a significant correlation with two of the three subscales of the MBI: emotional exhaustion and personal accomplishment. This suggests that nurses who practice mindful awareness regularly experience less emotional exhaustion and higher feelings of personal accomplishment in the workplace than their counterparts. This finding is also consistent in the current literature that examines similar constructs. In a study of 185 United States social workers, it was suggested that higher frequencies of self-care were significantly correlated with lower scores of emotional exhaustion and depersonalization, and higher scores of personal accomplishment (Weekes, 2014). This indicates that those who performed higher frequencies of self-care, regardless of which domains of self-care were targeted, experienced lower burnout symptoms (Weekes, 2014). In a literature review of different interventions to reduce nurse workplace stress, interventions meant to decrease stress while promoting resilience (relation training, social support, cognitive techniques, music) showed that these types of self-care interventions were lowered depersonalization and enhance reported personal accomplishment (Mimura & Griffiths, 2003).

A literature review examining how self-care strategies impacted nurses revealed that self-care interventions have mixed results on their effectiveness in terms of improving physical,

mental, and emotional health in the nursing profession; however, a variety of self-care habits targeting multiple domains of human needs were effective at reducing reported burnout symptoms including both emotional exhaustion and depersonalization (Kravits, McAllister-Black, Grant, & Kirk, 2010). This review also highlighted the need for more specific studies relating types of self-care and burnout in the nursing profession to substantially understand the relationship between the two constructs (Kravits et al., 2010). Many of the conclusions in these studies are mirrored by this study.

Mindfulness

Mindfulness as a strategy to reduce burnout coordinates well with the current literature that mindfulness may reduce stress, a key precursor to burnout. Johns Hopkins University conducted a meta analysis of 47 meditation trials that revealed the positive effects mindfulness had on easing psychological stress such as anxiety and depression (Corliss, 2014). In another study published in *The Journal of the American Medical Association* showed that simply teaching a group of individuals suffering from generalized anxiety disorder simple mindfulness s techniques significantly reduced their levels of stress and anxiety (Corliss, 2014). Mindfulness may be a helpful resource against the effects of burnout in the nursing profession.

Mindfulness-based stress reduction programs have also been shown to be protective against excessive stress, a key precursor to burnout. A study of 200 medical and premedical students discovered that an 8-week mindfulness-based stress reduction program lowered stress and depression while increasing empathy levels (Shapiro, Schwartz, & Bonner, 1998). A randomized trial of healthcare professionals found that a mindfulness-based stress reduction program decreased perceived stress and improved self-compassion scores (Shapiro, Astin,

Bishop, & Cordova, 2005). Research, including this study's results, further support the idea that mindfulness-based self-care techniques may be a valuable tool in the protection against burnout.

Implications for Practice

Providing a sustainable and healthy work-life balance is essential to maintaining a positive culture of caring in the nursing community. This study offers further support, in addition to existent research, that suggests self-care habits may be a beneficial wellness intervention to target or prevent the effects of burnout among nurses. Mindfulness-based interventions have been specifically known to target work-related burnout and improve productivity when practiced regularly (Cook-Cottone & Guyker, 2017). This study further supports this relationship by offering statistically significant correlations between mindful awareness and two subscales of burnout: emotional exhaustion and depersonalization. This supports the use of mindfulness-based self-care habits in the nursing community as a tool to prevent or mitigate burnout. In addition, this could also encourage nurses as individuals, nursing schools, and agencies that employ nurses to emphasize self-care and mindfulness when educating on a sustainable work experience.

Strengths, Limitations, and Future Directions

Limitations

The evaluators acknowledge several limitations in this study. The sample was limited in its response from night shift and several unit types. In addition, the survey was taken during work hours at the hospital site, and there is little known about how being in the work environment affected responses about workplace burnout. This potentially had an impact on how nurses chose to answer questions about their own health behavior and workplace emotions. The survey itself was reliant on self-reporting. Self-reporting can contribute to response bias either

negatively or positively. It is undeterminable whether self-reporting impacted this particular population. In addition, this study utilized a single capture response limiting the ability to determine causation or changes in the responses over time. By nature of the study, correlation between constructs does not prove causation.

Strengths

While there are limitations to this study, the data and analysis revealed a significant relationship between mindful awareness and the components of burnout. It also provided a baseline assessment of nurse burnout, self-reported health, and types of self-care habits. The partnering organization can use this information to encourage a nursing culture of caring within the hospital. It can also be used as a starting point for the partnering hospital to develop strategies aimed at encouraging self-care, particularly mindfulness-based self-care for the nursing staff.

In addition to benefiting the partnering agency, this study provided additional research into individual wellness interventions and their link to burnout. In particular, this study highlighted the correlation between mindfulness-based self-care techniques and the components of burnout. This could be used a foundation for future studies evaluating the same constructs. This study met the goal of answering the two hypotheses stated previously and offers valuable data on its main concepts.

Future Directions

The results of this study indicate the need for further research on mindfulness-based self-care techniques and their potential affects on the symptoms of nurse burnout. This study provides a foundation for future studies such as projects aiming to look at specific mindfulness-based self-care techniques and their correlation to burnout or as a foundational study that aims to prove causation between these constructs. This study could also be used as a starting point for quality

improvement (QI) initiates in hospital settings that wish to decrease their effects of nurse burnout and provide a more sustainable culture of nursing.

Conclusion

Nurse burnout is an issue affecting more than just the nurse. It transcends to patient safety, the healthcare system, and the health of the nursing profession. Although system-wide changes have been suggested as a possible solution to the growth of burnout symptoms in the nursing community, these changes require a large investment in time and money. Large-scale changes may potentially be beneficial in the future, however; presently there are nurses struggling to cope from emotional exhaustion, depersonalization, and a decreased sense of personal accomplishment. In order to benefit this current problem, individual wellness interventions may offer immediate support to nurses. Specifically, self-care techniques that emphasize mindfulness can be a cost-effective, simple, and timely targeted intervention to reduce or prevent the effects of nurse burnout. Mindfulness based self-care habits, when practiced habitually, lower the onset of mental health symptoms, burnout from work or school, and increase productivity (Cook-Cottone & Guyker, 2017). By prioritizing and supporting nurses with mindfulness education and techniques, the nursing community can begin to combat the effects of nurse burnout. Burnout is a growing issue in the nursing community, and more research and concern for techniques or interventions aimed to mitigate or inhibit its effects is essential.

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Figures

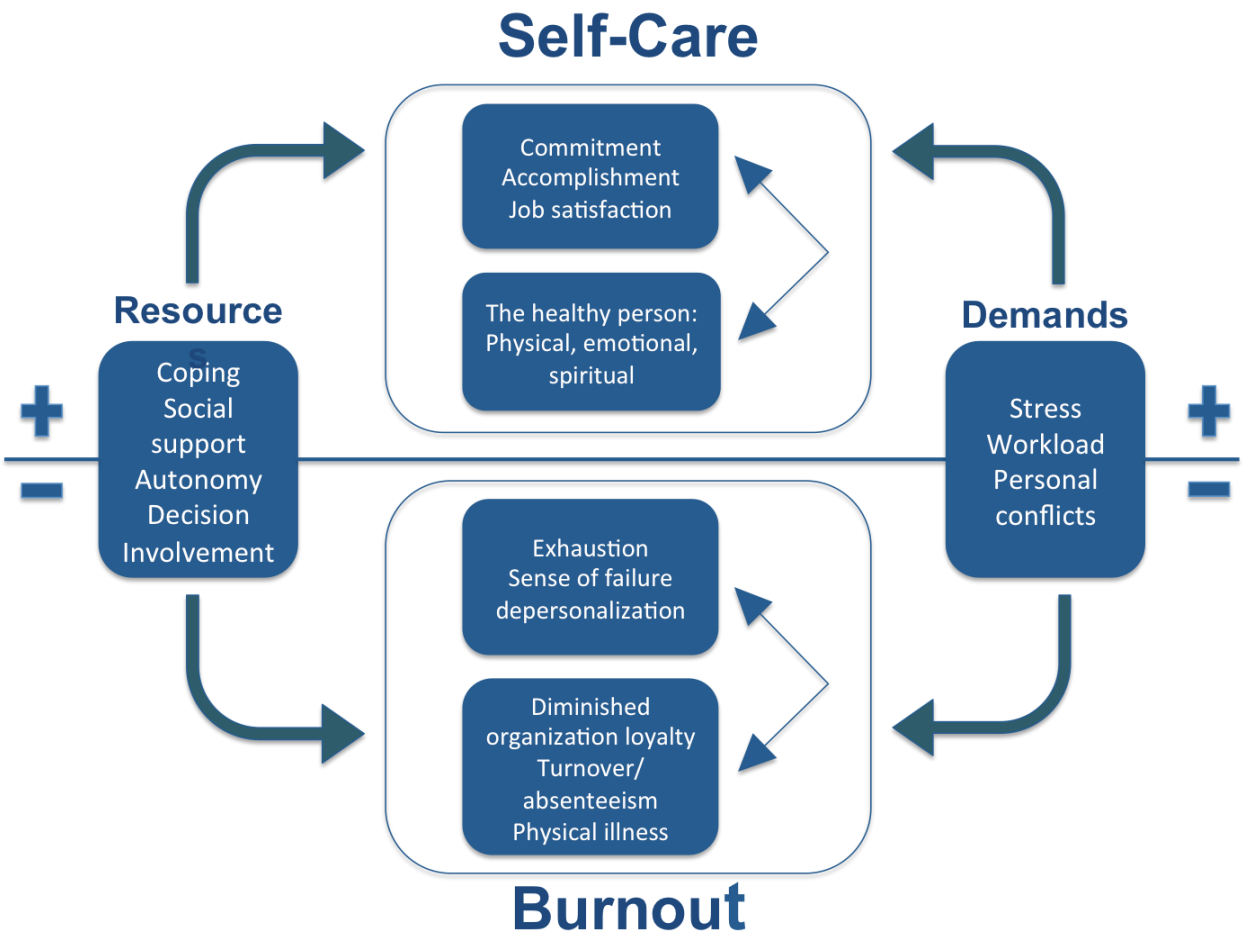


Figure 1: This model depicts an adaptation of both Orem's Self-Care Theory and Maslach's Multidimensional Theory of Burnout as it pertains to the nurse population.

Appendix A

Self-Care and Nurse Burnout: A Survey

Letter of Invitation:

Thank you for your interest in participating in this study. Participation is completely voluntary. The more we understand about how to protect nurses from burnout, the better we can solicit an environment of support within the nursing community. This study aims to learn more about how we can support and promote a healthy, well-balanced lifestyle by incorporating health and well-being into a culture of caring. Please respond to all items of the survey. The total survey should take less than 10 minutes. If you have any questions or concerns please contact me at hannah.stirnaman@pop.belmont.edu.

Thank you for your participation,

Hannah Stirnaman, BSN, RN

What is your gender?

- ○ Male (1)
- ○ Female (2)
- ○ Other (3)

What is your age in years?

_____

Please specify your ethnicity

- ○ White
- ○ African American
- ○ Hispanic or Latino
- ○ American Indian or Alaska Native
- ○ Asian
- ○ Native Hawaiian or Pacific Islander
- ○ Other

How many years have you been practicing as a nurse?

_____

What is your highest level of education?

- ○ Associate Degree
- ○ Bachelor's Degree
- ○ Master's Degree
- ○ Doctoral Degree

What is your current work commitment?

- ○ Full time
- ○ Part time
- ○ PRN (as needed)

What type of unit do you work on?

- ○ Emergency Department
- ○ CCU
- ○ Med/surg or med/tele
- ○ Pediatrics
- ○ Geriatrics
- ○ Women's Health/Labor and Delivery
- ○ Other: Please explain _____

What shift type best describes your work pattern?

- ○ Day shift
- ○ Night shift
- ○ Mid shift
- ○ Other: Please explain _____

In general, how would you rate your overall health?

- ○ Excellent
- ○ Very Good
- ○ Good
- ○ Fair
- ○ Poor

In the past **week,** how many **days** did you do the following?

	Never (0 days)	Rarely (1 day)	Sometimes (2-3 days)	Often (3-5 days)	Regularly (6-7 days)
I drank at least 6 to 8 cups of water	○	○	○	○	○
I ate a variety of nutritious foods (e.g., vegetables, protein, fruits, and grains)	○	○	○	○	○
I planned my meals and snacks	○	○	○	○	○
I exercised at least 30-60 minutes	○	○	○	○	○
I took part in sports, dance, or other scheduled physical activities	○	○	○	○	○
I did sedentary activities instead of exercising (e.g., watched TV, worked on the computer, etc.)	○	○	○	○	○
I planned/scheduled my exercise for the day	○	○	○	○	○
I practiced yoga or another mind/body practice (e.g., Tae Kwon Do, Tai Chi)	○	○	○	○	○

In the past **week**, how many **days** did you do the following?

	Never (0 days)	Rarely (1 day)	Sometimes (2-3 days)	Often (3-5 days)	Regularly (6-7 days)
I spent time with people who are good to me	○	○	○	○	○
I felt supported by people in my life	○	○	○	○	○
I felt that I had someone who would listen to me if I became upset	○	○	○	○	○
I felt confident that people in my life would respect my choice if I said "no"	○	○	○	○	○
I scheduled/planned time to be with people who are special to me	○	○	○	○	○

In the past **week**, how many **days** did you do the following?

	Never (0 days)	Rarely (1 day)	Sometimes (2-3 days)	Often (3-5 days)	Regularly (6-7 days)
I had a calm awareness of my thoughts	○	○	○	○	○
I had a calm awareness of my feelings	○	○	○	○	○
I had a calm awareness of my body	○	○	○	○	○
I carefully selected which of my thoughts and feelings I used to guide my actions	○	○	○	○	○

In the past **week**, how many **days** did you do the following?

	Never (0 days)	Rarely (1 day)	Sometimes (2-3 days)	Often (3-5 days)	Regularly 6-7 days)
I kindly acknowledged my own challenges and difficulties	○	○	○	○	○
I engaged in supportive and comforting self-talk	○	○	○	○	○
I reminded myself that failure and challenge are part of the human experience	○	○	○	○	○
I gave myself permission to feel my feelings	○	○	○	○	○
I experienced meaning and/or a larger purpose in my work/school life	○	○	○	○	○
I experienced meaning and/or a larger purpose in my private/personal life	○	○	○	○	○

In the past **week**, how many **days** did you do the following?

	Never (0 days)	Rarely (1 day)	Sometimes (2-3 days)	Often (3-5 days)	Regularly (6-7 days)
I did something intellectual to help me relax (e.g., reading a book, writing)	○	○	○	○	○
I did something interpersonal to relax (e.g., connected with friends)	○	○	○	○	○
I did something creative to relax (e.g., drawing, played an instrument, painting)	○	○	○	○	○
I listened (e.g., to music, a podcast, radio show, sound machine) to relax	○	○	○	○	○
I sought out images to relax (e.g., art, movies, nature)	○	○	○	○	○
I sought out smells to relax (nature, candles, baking, lotions, essential oils)	○	○	○	○	○

In the past **week**, how many **days** did you do the following?

	Never (0 days)	Rarely (1 day)	Sometimes (2-3 days)	Often (3-5 days)	Regularly (6-7 days)
I kept my work area organized to support my work tasks	○	○	○	○	○
I maintained a manageable schedule	○	○	○	○	○
I maintained balance between the demands of others and what is important to me	○	○	○	○	○
I maintained a comforting and pleasing living environment	○	○	○	○	○

In the past **week**, how many **days** did you do the following?

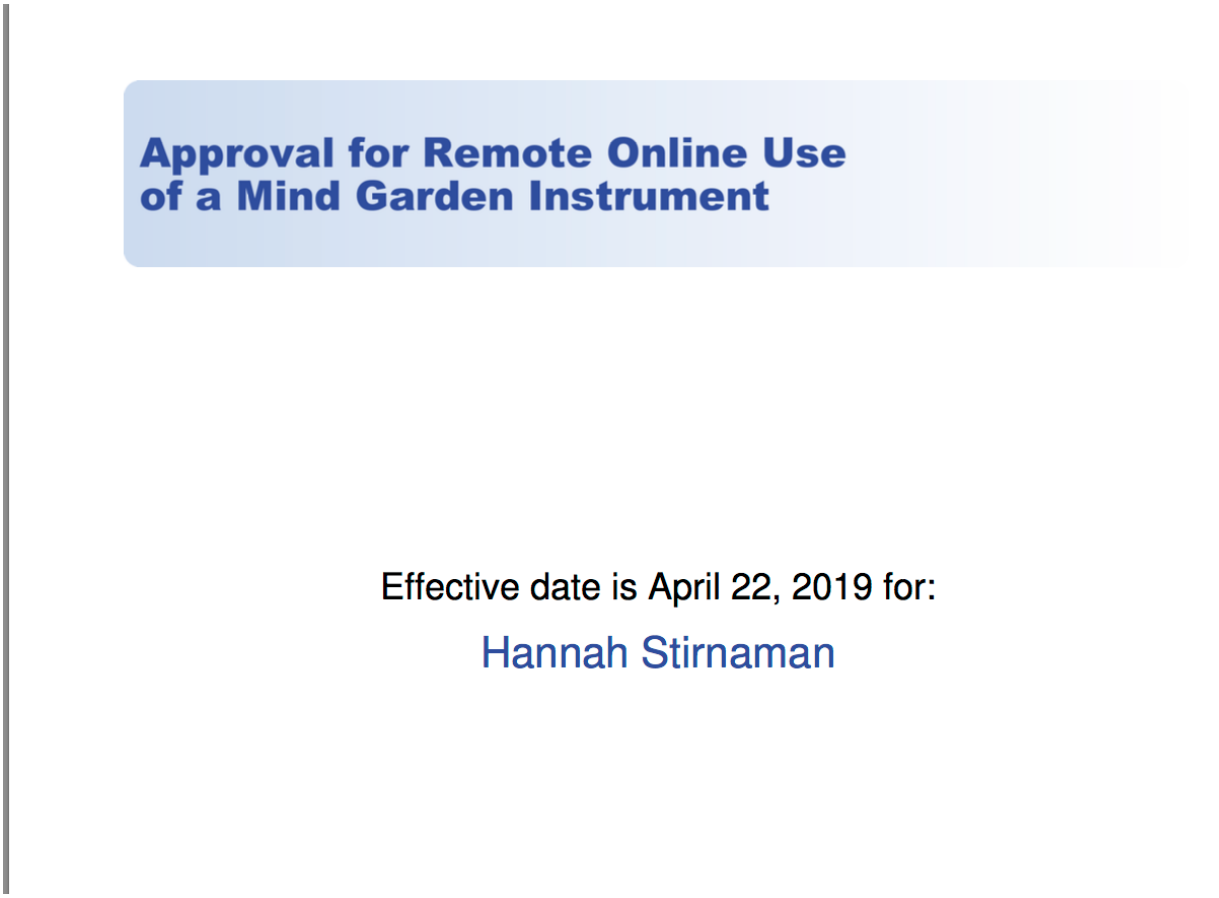
	Never (0 days)	Rarely (1 days)	Sometimes (2-3 days)	Often (3-5 days)	Regularly (6-7 days)
I took time to acknowledge the things for which I am grateful	○	○	○	○	○
I planned/scheduled pleasant activities that were not work related	○	○	○	○	○
I used deep breathing to relax	○	○	○	○	○
I meditated in some form (e.g., sitting meditation, prayer, self-reflection)	○	○	○	○	○
I rested when I needed to (e.g. when not feeling well, after a long work out)	○	○	○	○	○
I got enough sleep to feel rested and restored when I woke up	○	○	○	○	○

In the past **week**, how many **days** did you do the following?

	Never (0 days)	Rarely (1 day)	Sometimes (2-3 days)	Often (3-5 days)	Regularly (6-7 days)
I engaged in a variety of self-care strategies	○	○	○	○	○
I planned my self-care	○	○	○	○	○
I explored new ways to bring self-care into my life	○	○	○	○	○

Maslach Burnout Inventory – Human Services Survey for Medical Professionals was also included in the electronic survey, but was excluded from the appendix due to copyright.

Appendix B



Approval for Remote Online Use of a Mind Garden Instrument

Effective date is April 22, 2019 for:

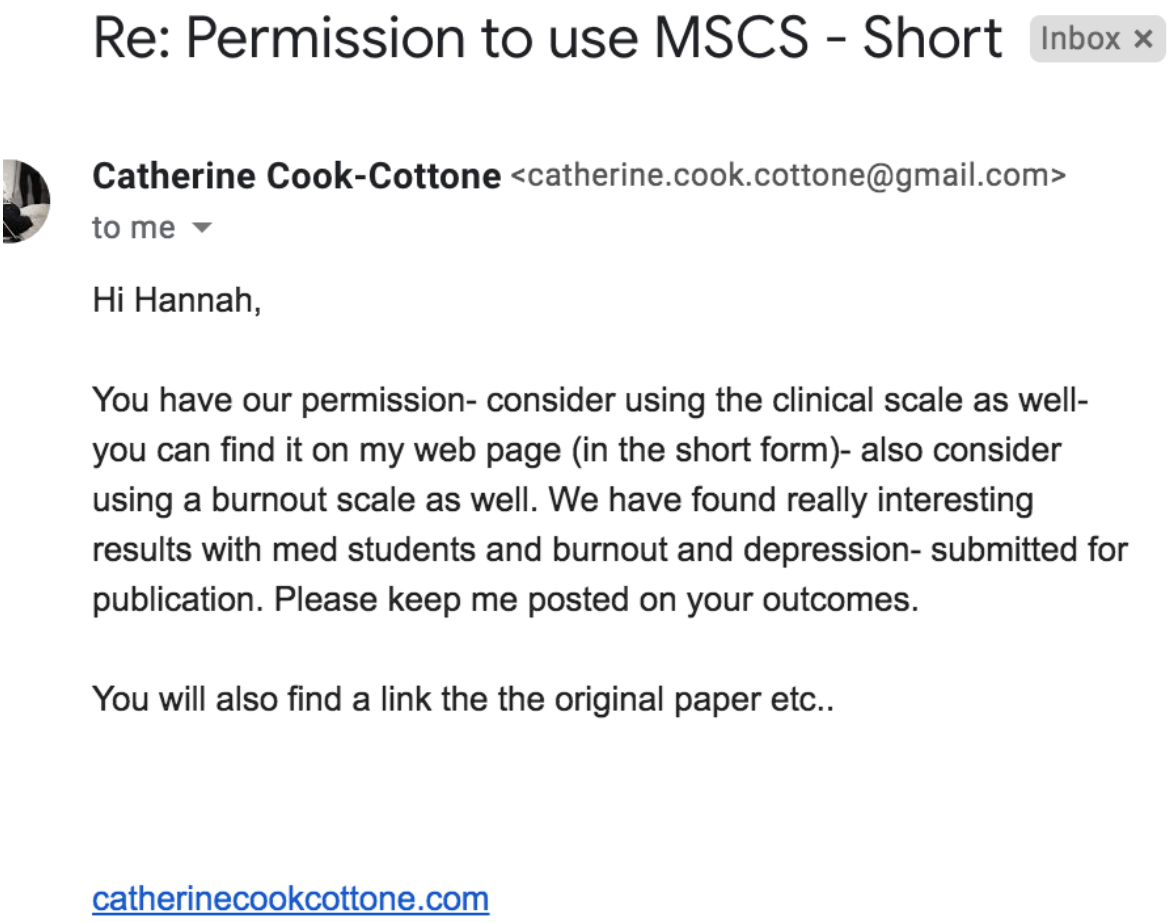
Hannah Stirnaman

The Remote Online Survey License is a data license for research purposes only. This license grants one permission to collect and disclose (a) item scores and scale scores, (b) statistical analyses of those scores (such as group average, group standard deviation, T-scores, etc.) and (c) pre-authorized sample items only, as provided by Mind Garden, for results write-up and publication.

The instrument items, directions, manual, individual report, group report, and any other descriptive information available through Mind Garden is the intellectual property of the copyright holder and can be used only with purchase or written permission from Mind Garden.

added 13 September 2018

Confirmation the researcher obtained permission to use the MBI – HSS (MP) for research purposes.



Re: Permission to use MSCS - Short Inbox ×

Catherine Cook-Cottone <catherine.cook.cottone@gmail.com>
to me

Hi Hannah,

You have our permission- consider using the clinical scale as well- you can find it on my web page (in the short form)- also consider using a burnout scale as well. We have found really interesting results with med students and burnout and depression- submitted for publication. Please keep me posted on your outcomes.

You will also find a link the the original paper etc..

catherinecookcottone.com

Confirmation to use the MSCS – SHORT for research purposes.

Tables

Table 1

Table 1. Sample Descriptive Statistics	
Demographics	
Gender	
Male	n=18 (86.7%)
Female	n=118 (13.3&)
Age (in years)	Mean: 39.4 Median: 36 Range: 22-68 Std Deviation: 12.2
Race	
White	n=128 (94.1%)
African American	n=2 (1.5%)
Hispanic	n=4 (2.9%)
Asian	n=1 (0.7%)
Other	n=1 (0.7%)
Years of Nursing Experience	Mean: 12.7 Median: 9.5 Range: 0.40-43 Std. Deviation: 10.3
Highest Level of Education	
Associate Degree	n=54 (39.7%)
Bachelor's Degree	n=77 (56.6%)
Masters Degree	n=5 (3.7%)
Work Commitment	
Full time	n=98 (72.1%)
Part time	n=8 (5.9%)
PRN (as needed)	n=30 (22.1%)
Unit Type	
Emergency Department	n=32 (23.5%)
Cardiac Care Unit	n=20 (14.7%)
Med/surg, med/tele	n=31 (22.8)
Pediatrics	n=6 (4.4%)
Geriatrics	n=4 (2.9%)
Women's Health/Nursery	n=15 (11%)
Surgical Services	n=20 (14.7%)
Float Pool	5n=8 (5.9%)
Shift Type	
Day Shift	n=91 (66.9%)
Night Shift	n=35 (25.7)

Mid Shift Varied Shifts	n=4 (2.9%) n=6 (4.4%)
Self Reported General Health	Mean: 3.6 Median: 4 Std. Deviation: 0.8 Range: 5

Table 2

Table 2: Correlation of Self-Reported Health to MBI Subscales				
		MBI Depersonalization	MBI Emotional Exhaustion	MBI Personal Accomplishment
Self-Reported General Health	Correlation Coefficient*	-.019	-.127	.192**
	Sig. (2-tailed)	.826	.139	.025
* Spearman's Rho coefficient. **Correlation is significant at the 0.05 level (2-tailed).				

Table 3

Table 3: Correlation of MBI Emotional Exhaustion to the Self-Care Subscales								
	Unstandardized Coefficients		Standardized Coefficients			Correlations		
Mindful Self Care Scale Subscales	B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part
Physical	-.227	.170	-.116	-1.34	.183	-.241	-.118	-.104
Supportive Relationships	-.099	.326	-.029	-.305	.761	-.275	-.027	-.024
Mindful Awareness	-1.088	.347	-.352	-3.14	.002	-.437	-.268	-.244
Self Compassion	-.001	.242	-.001	-.005	.996	-.322	.000	.000
Mindful Relaxation	.169	.216	.082	.784	.435	-.170	.069	.061
Supportive Structure	-.369	.355	-.107	-1.04	.301	-.318	-.092	-.081
Clinical	-.324	.273	-.155	-1.19	.238	-.316	-.105	-.092
General	.381	.331	.136	1.15	.252	-.203	.102	.090
Dependent Variable: MBI Emotional Exhaustion								

Table 4

Table 4: Correlation of MBI Depersonalization to the Self-Care Subscales								
	Unstandardized Coefficients		Standardized Coefficients			Correlations		
Mindful Self Care Scale Subscales	B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part
Physical	-.075	.098	-.073	-.760	.449	-.120	-.067	-.065
Supportive Relationships	-.293	.188	-.165	-1.16	.123	-.226	-.137	-.133
Mindful Awareness	.021	.200	.013	.105	.916	-.162	.009	.009
Self Compassion	-.126	.140	-.119	-.902	.369	-.189	-.080	-.077
Mindful Relaxation	-.034	.125	-.031	-.273	.786	-.146	-.024	-.023
Supportive Structure	.151	.205	.083	.735	.463	-.106	.065	.063
Clinical	-.130	.158	-.118	-.822	.413	-.187	-.073	-.070
General	.139	.191	.094	.724	.470	-.100	.064	.062
Dependent Variable: MBI Depersonalization								

Table 5

Table 5: Correlation of MBI Personal Accomplishment to the Self-Care Subscales								
	Unstandardized Coefficients		Standardized Coefficients			Correlations		
Mindful Self Care Scale Subscales	B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part
Physical	.048	.117	.037	.408	.684	.158	.036	.033
Supportive Relationships	.184	.225	.082	.816	.416	.277	.072	.066
Mindful Awareness	.535	.239	.261	2.236	.027	.383	.195	.181
Self Compassion	.079	.167	.059	.471	.638	.310	.042	.038
Mindful Relaxation	-.051	.149	-.037	-.343	.732	.188	-.030	-.028
Supportive Structure	.005	.245	.002	.020	.984	.239	.002	.002
Clinical	.190	.189	.137	1.007	.316	.299	.089	.082
General	-.116	.228	-.062	-.509	.611	.211	-.045	-.041
Dependent Variable: MBI Personal Accomplishment								