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An Exploratory Study Of The Influence Of Perceived Organizational Support, Coworker Social Support, The Nursing Practice Environment, And Nurse Demographics On Burnout In Palliative Care Nurses

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AN EXPLORATORY STUDY OF THE INFLUENCE OF PERCEIVED
ORGANIZATIONAL SUPPORT, COWORKER SOCIAL SUPPORT,
THE NURSING PRACTICE ENVIRONMENT, AND NURSE DEMOGRAPHICS
ON BURNOUT IN PALLIATIVE CARE NURSES

by

MARCIA A. LOWE

PATRICIA PATRICIAN, COMMITTEE CHAIR
MARIE BAKITAS
LISLE HITES
LORI LOAN
DHEERAJ RAJU

A DISSERTATION

Submitted to the graduate faculty of The University of Alabama at Birmingham,
in partial fulfillment of the requirements for the degree of
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2019

AN EXPLORATORY STUDY OF THE INFLUENCE OF PERCEIVED
ORGANIZATIONAL SUPPORT, COWORKER SOCIAL SUPPORT, THE NURSING
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MARCIA A. LOWE

SCHOOL OF NURSING

ABSTRACT

Burnout, a condition characterized by emotional exhaustion, depersonalization, and decreased personal accomplishment, has been studied in many disciplines in healthcare, including nursing, medicine, and social work. Working with palliative care patients and their families is innately challenging and may predispose nurses to burnout. The purpose of this study is to examine the influence of perceived organizational support (POS), coworker social support, the nursing practice environment, and nurse demographics (age, years of nursing experience, education level, marital status, and gender) on burnout in a national sample of palliative care nurses. The study aims are as follows:

Aim 1: To examine the influence of POS, coworker social support, and nursing practice environment on burnout in palliative care nurses.

Aim 2: To examine the influence of age, years of nursing experience, education level, marital status, and gender on burnout in palliative care nurses.

 Aim 3: To examine potential moderators (POS and coworker social support) on the relationship between demographic characteristics and palliative care nurse burnout.

A convenience sample of 73 Hospice and Palliative Nurses Association (HPNA) registered nurses who were bedside caregivers was recruited from HPNA's membership.

Data were analyzed using Pearson's correlation, followed by regression modeling. Findings of this descriptive, cross-sectional study indicated that palliative care nurses had low to average levels burnout. There was a negative correlation between burnout and POS, and a significant negative correlation between burnout and coworker social support. The nurse practice environment of palliative care nurses was considered to be favorable. Strong organizational support and coworker social support, as well as a favorable work environment, may help to decrease nurse burnout. POS and coworker social support were not moderators for demographics of age and years of experience and their relationship to burnout.

Keywords: palliative care, perceived organizational support, coworker social support, nursing practice environment.

DEDICATION

This dissertation is dedicated to my husband, Chris. Everything is made possible only because of your unconditional love and relentless confidence in me. Thank you for standing by me through this journey. I look forward to many more wonderful years ahead.

I owe my deep gratitude to my mother, Ms. Evelyn R. Hughey, who preached and taught education every day of my life as I was growing up. My mother never said you can't; she said you **must** get an education. And because of my mother's instructions, I hold three degrees in nursing. I am who I am because of her.

To my friends who listened to me during countless days and nights, and the cohorts with whom I had the pleasure of working in the PhD program, I will always treasure the good and bad times we spent together. I will remember how we encouraged each other to press forward. Finally, if I have left anyone out, this is for you. Thank you for believing in and supporting me. *I love all of you!*

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First, let me thank my Heavenly Father, who gives me strength from day to day. It is with enormous gratitude and deep appreciation that I acknowledge the advice, patience, and guidance provided by my advisor, Dr. Patricia Patrician. I appreciate the path and support you provided, which helped shape this research I am presenting. Thank you for helping me accomplish my goals.

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LIST OF ABBREVIATIONS

ANA	American Nurses Association
HPNA	Hospice and Palliative Nurses Association
HSE	Health and Safety Executive Management Standards Indicator Tool (Peer Support Subscale)
IRB	Institutional Review Board
MBI	Maslach Burnout Inventory
NAM	National Academy of Medicine
NIOSH	National Institute of Occupational Safety and Health
PES-NWI	Practice Environment Scale of the Nursing Work Index
POS	Perceived Organizational Support
SIG	Special Interest Group
SPSS	Statistical Package for the Social Sciences
UAB	University of Alabama at Birmingham

CHAPTER 1

INTRODUCTION

Burnout, a condition characterized by emotional exhaustion, depersonalization, and decreased personal accomplishment (Maslach, 2003), has been studied in many disciplines in healthcare, including nursing, medicine, and social work. Symptoms associated with burnout include decreased energy, tiredness, exhaustion, and a negative evaluation of one's individual accomplishments (Ablett & Jones, 2007; Rizo-Baeza et al., 2017; Van Bogaert et al., 2014). A wealth of research has confirmed the hazardous effects of burnout on the health of nurses, including drug and alcohol abuse, somatic issues, and emotional dysfunctions, such as anxiety, depression, and low self-esteem (Maslach, Schaufeli, & Leiter, 2001; Vahey, Aiken, Sloan, Clarke, & Vargas, 2004; Van Bogaert et al., 2014). Burnout is also associated with increased nurse turnover, decreased patient satisfaction, and decreased job satisfaction among nurses (Lu, Zhao, & While, 2019; Vahey et al., 2004). For organizations, burnout can be expensive, because it is related to employee absenteeism, high turnover rates, tardiness, and difficulty recruiting and retaining staff (Halbesleben & Buckley, 2004; Lake, 1998; Laschinger & Leiter, 2006; Lee & Ashforth, 1996; Parker & Kulik, 1995).

Nursing is a compassionate and caring profession, and nurses often "go the extra mile" to take care of patients and families. However, providing gentle and thoughtful care to others can be demanding both physically and emotionally (Peery, 2010), especially given recent reports of nurses experiencing heavier workloads, sicker patients,

and fewer resources (Bogossian, Winters-Chang, & Tuckett, 2014; Galletta et al., 2016; Leiter & Laschinger, 2006; Maslach & Leiter, 2016). In August 2016, the Department for Professional Employees reported that approximately one-third of nurses scored in the "high burnout" range on the Emotional Exhaustion Subscale. Since burnout is strongly associated with nurses' health outcomes, it is important to consider work environments that may help prevent nurse burnout (Galletta et al., 2016; Leiter & Laschinger, 2006).

Palliative care strives to improve the quality of life of patients and families with advanced illnesses and/or distressing symptoms by addressing their physical, emotional, social, and spiritual needs (Bakitas, Bishop, Caron, & Stephens, 2010; Cheng, 2013; Gunhardsson, Svensson, & Berterö, 2008). For palliative care nurses, burnout can be extensive, because of repeated exposure to patient pain and suffering, patient deaths, and interactions with grieving families (Payne, 2001; Slocum-Gori, Hemsworth, Chan, Carson, & Kazanjian, 2013). Working with palliative care patients and their families is innately challenging and may predispose nurses to burnout (Chan et al., 2015; Parola, Coelho, Cardoso, Sandgren, & Apóstolo, 2018; Payne, 2001; Slocum-Gori et al., 2013). Additionally, staff may be confronted with thoughts concerning their own mortality (Ablett & Jones, 2007; Meier & Beresford, 2006). Because palliative care nurses are aware of patients' incurable illnesses and expectations of poor prognoses, they may develop intense personal relationships (Gambles, Wilkinson, & Dissanayake, 2003; Parola et al., 2018) and, thus, experience excessive grief from repeated losses.

Although palliative care nursing is stressful and demanding at times, many nurses find it personally rewarding (Fitch, Fliedner, & O'Connor, 2015; Kamal et al., 2016; Sansó et al., 2015). Many professionals in palliative care report high levels of

gratification, satisfaction, and meaning in their work, due to: (a) their team-based work environment; and (b) their ability to work closely with patients and their families to generate goals for care during the end of life or periods of high symptom burden (Parola et al., 2018).

Perceived Organizational Support

According to the perceived organizational support (POS) theory, employees form common opinions regarding how an organization values their contributions and cares for their well-being (Eisenberger & Huntington, 1986). According to Eisenberger and Huntington (1986), four general forms of perceived positive treatment received from the organization are considered important to the employee: equality, manager support, work environments, and organizational rewards. All are human values that lead to self-esteem enhancement and individual growth of employees (Yaghoubi, Pourghaz, & Toomaj, 2014). Little research has been done on the influence of POS on burnout among palliative care nurses.

Coworker Social Support

Burnout is associated with social support within the work environment. Jenkins and Elliott (2004) investigated levels of stressors and burnout of nursing staff in acute mental health settings and found that increased levels of support from coworkers were associated with lower levels of emotional exhaustion, a component of burnout. Coworker social support leads to helpful behaviors, such as assistance with daily responsibilities at work, as well as higher levels of job performance, low intentions for turnover, and lower

levels of emotional exhaustion (AbuAlRub, 2004; Jenkins & Elliott, 2004; Nissly, Barak, & Levin, 2005). Lack of social support at work is associated with a high level of burnout (Sochos, Bowers, & Kinman, 2012).

Social support from coworkers, managers, and family members has been found to decrease burnout. In a cross-sectional study addressing the relationship between organizational and social factors and burnout among registered and assistant nurses in Sweden, social support was found to increase well-being, decrease levels of stress, lessen burnout, and improve overall job satisfaction (Sundin, Hochwälder, Bildt, & Lisspers, 2007). Bakker, Demerouti, and Verbeke (2004) and Hobfoll (1985) contend that social support could enhance an employee's pool of available resources by substituting or adding to those resources that may be absent. Coworker social support may be strongly correlated with decreased burnout in nurses as a group, but little is known about this relationship specifically in palliative care nurses.

The Nursing Practice Environment

The literature reports that the nurse practicing environment affects nurse burnout (Aiken et al., 2011; Van Bogaert, Clarke, Vermeyen, Meulemans, & Van de Heyning, 2009; Van Bogaert, Clarke, Willems, & Mondelaers, 2013). Nurses consider work environments that support their ability to deliver high-quality care to be invaluable and to promote increased job satisfaction (Galletta et al., 2016; Leiter & Laschinger, 2006; Manojlovich, Antonakos, & Ronis, 2009). Many studies have reported that nurses whose work environments are supportive of professional practice have lower levels of burnout (Aiken et al., 2001; Lake et al., 2019; Lee, Chiang, & Kuo, 2019; Olds, Aiken, Cimiotti,

& Lake, 2017; Ulrich, Barden, Cassidy, & Vam-Davis, 2019). One multi-national study reported that working in a hospital with a better work environment, as opposed to a poor one, was associated with self-report of low levels of burnout in nine countries (Aiken et al., 2011).

In another study, higher levels of teamwork among nurses were associated with lower burnout levels (Rafferty, Ball, & Aiken, 2001). Nurses who reported additional support from managers, better staffing, and more positive interactions with nurses and physicians, reported lower levels of burnout (Van Bogaert et al., 2010). Very little research has been conducted on the nursing practice environment and burnout among nurses who work in palliative care units. Much of the research on the nursing practice environment and burnout has been conducted in the hospital, in the acute care or ICU setting, and at the individual nurse level.

Nurse Demographics

Conflicting results have been reported on the relationship between age, years of experience, and employee burnout. Brewer and Shapard (2004) found no association between age, years of experience, and burnout. However, age is the demographic variable that has been most frequently associated with burnout (Maslach et al., 2001). For example, Maslach (2003) stated that burnout is not as common among older adults because they are inclined to be more established and well-adjusted. Increased burnout among younger adults is thought to operate according to the "survival of the fittest" concept. Burnout typically happens within the first 1 to 5 years of a person's career. Thus, many young nurses experiencing burnout leave the profession very early

(Laschinger et al., 2019; Maslach, 2003). Consequently, those who stay are resilient (Maslach, 2003). Tourigny and Lituchy (2016) found older nurses reported fewer symptoms of burnout and depression, were more committed, and were more satisfied with their jobs. Limited studies have examined the relationship of age and years of experience to burnout in palliative care nurses.

Educational status also appears to influence burnout. Workers with higher levels of education tend to experience higher levels of burnout (Barnard, Street, & Love, 2006). It is plausible that people with higher levels of education are more likely to select stressful occupations with more responsibility. The higher levels of stress, and perhaps not necessarily the level of education, could lead to burnout (Maslach & Leiter, 2016; Maslach et al., 2001; Wang, Liu, & Wang, 2015). Another possibility is that highly educated individuals have greater expectations for their jobs, and experience stress and burnout if their expectations are not met (Hayes et al., 2006; Maslach et al., 2001). Additional studies are needed to determine the effect of education levels on burnout in palliative care.

Burnout is equally prevalent among male and female employees in general; however, gender differences exist with respect to additional demographic variables, such as education level (Ahola, Honkonen, & Isometsa, 2006). Duquette, Sandhu, and Beaudet (1994) reviewed studies examining the relationship between burnout and demographic factors and found no relationship with gender among nurses. In contrast, Ahola et al. (2006) surveyed 3,424 employees and concluded that low education level and low social status increased the risk of burnout for women, whereas marital status (single, divorced, or widowed as opposed to married) increased the risk for men.

Because of inconsistent reports on the effects of demographic variables, further research should examine demographic variables of age, years of nursing experience, education level, marital status, and gender, and their relationship to palliative care nurse burnout.

Statement of the Problem

Studies of nurses report a high incidence of burnout (Maslach et al., 2001; Vahey et al., 2004; Van Bogaert et al., 2014). The National Academy of Medicine (NAM) issued a national call to explore and address burnout in physicians, nurses, and other healthcare personnel due to its possible effects on quality, safety, and overall healthcare system performance (Dyrbye et al., 2017; West, Dyrbye, Erwin, & Shanafelt, 2016). The intent of the NAM initiative is to broadly disseminate evidence and recommendations to reduce burnout and improve the personal and professional health of all caregivers (Dyrbye et al., 2016).

Palliative care nurses are frequently exposed to serious illness and death, placing them at high risk for psychological and physical stress, which may lead to burnout (Fearon & Nicol, 2011). Many studies have assessed the prevalence of burnout in all palliative care personnel, from auxiliary staff to physicians (Dunwoodie & Auret, 2007; Koh et al., 2015; Pereira, Fonseca, & Carvalho, 2011). However, cross-sectional research studies specifically examining the long-term effects of repeated exposure to death and dying in the personal and professional lives of palliative care nurses are limited (Sinclair, 2011). Furthermore, research on the influence of POS, coworker social support, the nursing practice environment, and nurse demographics on burnout in palliative care nurses is lacking and will be the focus of this dissertation.

Background

Freudenberger (1974) defined burnout in the 1970s as a feeling of disappointment and being worn out from repeated dealings with other people's problems. In 1997 burnout was redefined as a psychological crisis that may arise among professionals involved in helping relationships (Maslach & Leiter, 1997; Parola, Coelho, Cardoso, Sanchez & Blanco, 2016). According to Maslach and Leiter (1997; 2017), burnout is a condition with three dimensions: emotional exhaustion, depersonalization, and a lack of personal accomplishment. The most common reason for burnout is work overload without enough rest; thus, emotional exhaustion occurs. Depersonalization refers to impersonal and detached interaction with patients and colleagues, which may occur as a result of emotional exhaustion (Leiter & Maslach, 2015; Maslach & Leiter, 1997). Decreased personal accomplishment refers to feelings of inadequacy as a professional (Parola et al., 2016).

Burnout is associated with increased voluntary nurse turnover at high cost to the organization, since hiring and orienting nurses is a significant expense (Aiken, Clarke, Sloane, Sochalski & Silber, 2002; Leiter, Jackson, & Shaughnessy, 2009; Tracy, 2017). According to the 2019 National Healthcare Retention & RN Staffing Report, the average cost of turnover for a bedside RN is $52,100 and ranges from $40,300 to $64,000, resulting in the average hospital losing $4.4–$6.9 million dollars annually (NSI Nursing Solutions, Inc., 2019).

According to a report released by the Department for Professional Employees (2016), many registered nurses complain that their current workloads are causing

burnout. According to the American Nurses Association (ANA), three out of four nurses reported stress due to work overload to be a major health concern (2011). In fact, 69% of nurses report that their work is a main cause of stress in their lives. Forty-nine percent of RNs under the age of 30, and 40% over the age of 30, have experienced high levels of burnout (American Nurses Association, 2011). The Healthy People 2020 goals include the importance of worksite stress reduction programs (United States Department of Health and Human Services, 2019).

In a study of approximately 68,000 registered nurses in 2007, it was reported that 37% of nurses working in hospitals, 35% of those working in nursing homes, and 22% of those working in other settings experienced a high degree of emotional exhaustion (McHugh, Kutney-Lee, Cimiotti, Sloane, & Aiken, 2011). In a subsequent study of 1,171 registered inpatient nurses, 18% reported burnout and depression, much higher than the national prevalence of about 9% for workers in general (Letvak, Ruhm, & Gupta, 2012).

Nurses regularly report hospital nurse staffing levels to be inadequate to deliver safe, quality care (Aiken et al., 2002; Aiken et al., 2018). The shortage of hospital nurses may be related to unreasonable or difficult nurse workloads, which are inadequate for patient safety (Aiken et al., 2002; Aiken et al., 2018; Lu, 2019; Rosenberg, 2019). Nursing shortages are projected to continue to increase in the United States over the next few decades (Buerhaus, 2008). Over the next 20 years, as nurses age and retire, some researchers predict little growth in the nursing profession (American Association of Colleges of Nursing, 2017; Buerhaus, 2008). Because of the projected growth in demand for nursing professionals and projection of many retiring and aging nurses, the necessity for nurses will far outweigh the anticipated supply. By 2022, there will be 1.2 million

openings for registered nurses. By 2025, the deficit is projected to double and be worse than any nursing shortage experienced since the 1960s (American Association of Colleges of Nursing, 2017; Buerhaus, Auerbach, & Staiger, 2009).

Studies have revealed that nurse staffing levels, among many other concerns in the hospital setting, such as excessive workload and complex patients, add to unsafe patient care and adverse patient outcomes (McGahan, Kucharski, Coyer, & Paper, 2012). Highly trained nurses are necessary to provide care to patients in specialty areas, such as hospice, oncology, and palliative care (Alacacioglu, Yavuzsen, Dirioz, Oztop, & Yilmaz, 2009). Data on the degree of nurse shortages in these specialties are limited; however, the shortage has been acknowledged by organizations such as the Hospice and Palliative Nurses Association (HPNA; 2011). As the nursing shortage accelerates, institutions must develop innovative approaches not only to recruit new staff, but also to retain their present staff (Gandi, Wai, Karick, & Dagona, 2011).

Offering care to patients and their families during times of life-changing illness may add to job frustration, estrangement from work, and fatigue, adversely affecting the quality of life of palliative care nurses (Alacacioglu et al., 2009). In addition, the increasing work pace and high demands placed on team members are thought to place palliative care nurses at a high risk for burnout (Pavelkova & Buzgova, 2015). Adequate support programs for nurses may not be offered frequently enough to prevent the occurrence of burnout (Kowalski et al., 2010). It is important for nurse managers and supervisors to be observant for changes in the behavior of employees who may be exhibiting signs and symptoms of burnout. These may include: missed work, lack of compassion, and a non-caring attitude (Kowalski et al., 2010).

Little research has been done to investigate the relationship between POS, coworker social support, the nursing practice environment, and nurse demographics among palliative care nurses. The literature suggests that the burnout phenomenon affects a person's ability to perform their job (Maslach & Jackson, 1981; Maslach & Leiter, 2017). Because nurses describe burnout as characterized by feeling emotional exhaustion, distancing oneself from patients, and feeling nonproductive at work, it is practical to suggest that burnout diminishes the chance of involved skillful delivery of care by nurses (Laschinger & Leiter, 2006; Poghosyan, Clarke, Finlayson, & Aiken, 2010).

The National Institute for Occupational Safety and Health (NIOSH) recognizes employee stress at work as a significant problem and offers two main themes in the NIOSH job stress research program. The themes are: 1) to better comprehend the effect of work organization on disease, injury, and stress; and 2) to recognize ways to reshape jobs to form safer and healthier work environments. NIOSH recommends epidemiological studies to determine how ever-changing organizational practices influence risk factors for occupational stress and other dangerous exposures at work, such as burnout. It also recommends the development of improved methods for job stress studies, including observation tools to better comprehend how organizational changes are affecting job stress, and how workplace stress can contribute to disease, injury, and stress. The recommendations by NIOSH are highly relevant to this study (NIOSH, 2016).

The ANA does not have a position statement or recommendations for nurse burnout; however, Aycock and Boyle (2009) and Boyle (2011) suggest onsite counseling

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services, employee emotional support for healthcare providers experiencing burnout, debriefing sessions, massage sessions, bereavement interventions, and support groups. Having a better understanding of burnout in nurses working in different health settings, especially those who are providing skilled care to terminally ill patients and their families, such as with palliative care, would be beneficial. Additionally, by assessing the role of POS, coworker social support, the nursing practice environment, and nurse demographics in burnout in palliative care nurses, applicable and effective burnout reduction training programs may be developed.

<p style="text-align:center">Significance of the Study</p>

Palliative care is becoming more prominent in healthcare; therefore, it is significant to address the caregivers' perspectives (Peterson et al., 2010). Because of advances in medicine in this dynamic field, the number of individuals living many years with incurable chronic illnesses is increasing (Gama, Barbosa, & Vieira, 2012; Grant, Elk, Ferrell, & Morrison & Von Guten, 2009; Parola et al., 2016). This will contribute to a growing need for specialty care, such as palliative care, which is projected to escalate over the next several decades (Fitch et al., 2015; Parola et al., 2016). Because of sicker patients, high expectations of organizations, lack of empowerment, and a belief that the work is unappreciated, burnout is likely to become an increasing burden for nurses, patients, and organizations. Palliative care nurses are an understudied population that may be at higher risk for burnout than the rest of the profession.

Purpose and Aims of the Study

The purpose of this study is to examine the influence of POS, coworker social support, the nursing practice environment, and nurse demographics (age, years of nursing experience, education level, marital status, and gender) on burnout in a national sample of palliative care nurses. The study aims are as follows:

Aim 1: To examine the influences of POS, coworker social support, and nursing practice environment on burnout in palliative care nurses.

Aim 2: To examine the influence of age, years of nursing experience, education level, marital status, and gender on burnout in palliative care nurses.

Aim 3: To examine potential moderators (POS and coworker social support) on the relationship between demographic characteristics and palliative care nurse burnout.

Research Questions

This study has the following research questions:

RQ1. What is the level of burnout in a national sample of palliative care nurses?

RQ2. Do POS, coworker social support, and the nursing practice environment influence palliative care nurse burnout?

RQ3. Do individual (age, education level, gender, marital status) and work characteristics (years of nursing experience) influence burnout in the palliative care nurse?

RQ4. Does POS or coworker social support moderate the relationship between age and burnout?

RQ5. Does POS or coworker social support moderate the relationship between years of nursing experience and burnout?

Conceptual Framework

Modified versions of both the Maslach burnout theory and Eisenberger's POS theory underpin this study. In addition, Donabedian's structure, process, and outcome framework provides the overarching conceptual framework for the study (1966). (See Figure 1.) Maslach's theory is based on the idea that burnout is an occupationally triggered condition of emotional exhaustion, depersonalization, and reduced feeling of personal accomplishment (Maslach & Jackson, 1982). Eisenberger's POS theory suggests that an employee develops universal beliefs regarding the degree to which the organization values his or her contributions. As employees perceive support from the organization and coworkers, their emotional and psychological stressors may decrease, thus decreasing burnout (Rhoades & Eisenberger, 2002).

Conceptual Model

Structure	Process (Context)	Outcome

Demographics

Individual
Age
Gender
Educational Level

Work
Years of experience

**Moderating Variable
Perceived Organizational
Support**

**Nursing
Practice
Environment**

**Moderating
Variable
Co-worker
Social Support**
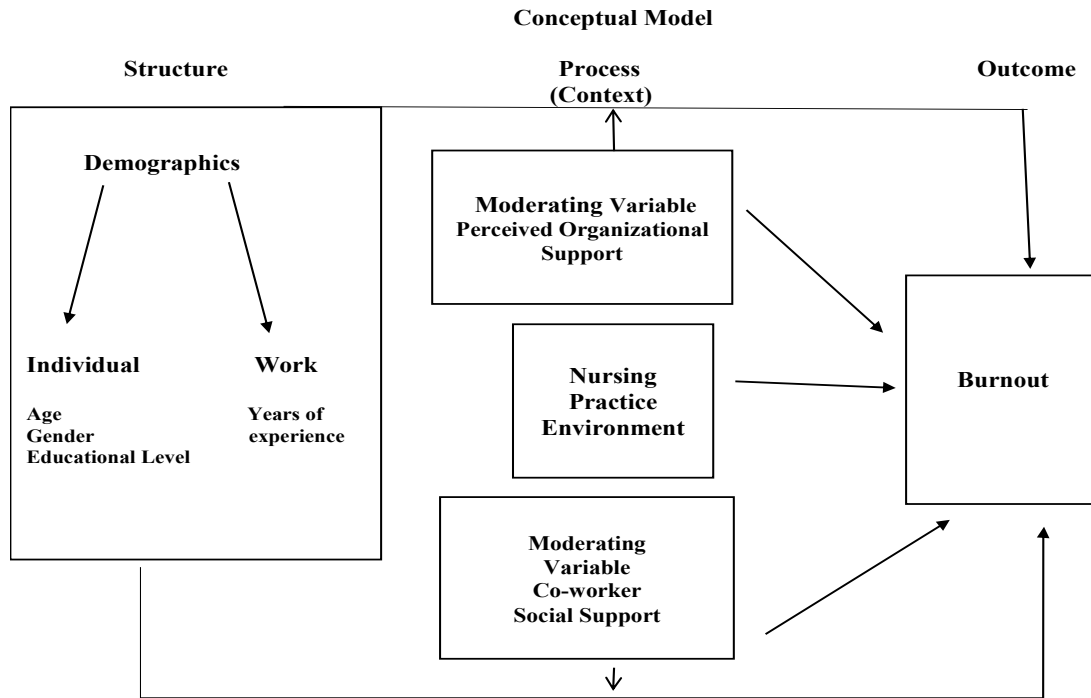
Burnout

Figure 1. Diagram of modified theoretical model.

Brief Overview of Design

This study used a cross-sectional, correlational design, with an online survey. This design was chosen to observe relationships between burnout, POS, coworker social support, and the nursing practice environment. The design is appropriate to study groups of participants in several stages of professional development at the same time and when variables are multifaceted (Shadish, Cook, & Campbell, 2002). In this study, age, years of nursing experience, education level, marital status, and gender were explored to examine differences between participants who are at various phases of their professional careers. The target population consisted of 800 registered staff nurses who worked in palliative care and were active members of the HPNA.

Variable Definitions

The following operational definitions are used in this study:

Burnout has been conceptualized as a psychological condition comprising emotional exhaustion, depersonalization, and reduced personal accomplishment arising from a continued inequality between what a person gives and receives emotionally in the place of work (Maslach & Jackson, 1982). The level of burnout has been measured using the Maslach Burnout Inventory (MBI). The MBI is a reliable instrument, with Cronbach's alpha internal consistency results ranging from .71 to .90 (Maslach, Jackson, & Leiter, 1996; Van Bogaert et al., 2009). Cronbach's alpha of reliability ranges from 0 to 1; between .80 and .90 is considered to be very good (Polit & Beck, 2012). The MBI is a 22-item survey used often to determine or forecast the phenomenon, and encompasses three components:

1. Emotional exhaustion is considered the main factor underlying burnout and is defined as being emotionally overextended and mentally exhausted by one's work.

2. Depersonalization measures an unfeeling and impersonal response toward receivers of care, one's service, or treatment.

3. Personal accomplishment measures feelings of competence and success in one's work.

The Emotional Exhaustion Subscale of the MBI is the most frequently used subscale in studying burnout because most investigators find it to be the most robust and to have the strongest predictive validity of the three burnout subscales (Aiken & Sloane, 1997; Kalliath, O'Driscoll, Gillespie, & Bluedorn, 2000; Rafferty et al., 2001; Vahey et

al., 2004). The seven-item Emotional Exhaustion Subscale, which describes feelings of being emotionally fatigued due to work, was used in this survey. Scores greater than 27 indicate burnout (Maslach et al., 1996; Van Bogaert et al., 2009).

Perceived organizational support (POS) is defined as employees' perception of the extent to which the organization values their contributions and cares about their well-being. Greater POS is associated with greater psychological health, a more encouraging alignment with the organization, and interactive outcomes helpful to the organization (Allen & Shanock, 2013; Rhoades & Eisenberger, 2002). The shortened eight-item version of Eisenberger's POS Scale was used to measure POS. The scale uses a 7-point Likert rating from 0 (strongly disagree) to 6 (strongly agree). An example item is: "The organization values my contribution to its well-being." Total scores range between 0 and 48, with a mean score of 24. Therefore, the higher the score, the higher the level of organizational support perceived (Rhoades & Eisenberger, 2002). This version is frequently used in the POS literature and confirms a reliability coefficient for POS of 0.89 (Rhoades & Eisenberger, 2002).

Coworker Social Support is defined as the combination of social interactions, emotional and behavioral communications, and an individual's perception about the sufficiency and availability of different types of support (Hamaideh, 2011). Characteristic to the conceptual definition of social support is the idea of exchanges of resources between at least two individuals (Shirey, 2004). Perceived social support from coworkers will be operationalized using the Health and Safety Executive (HSE) Management Standards Indicator Tool. The HSE Indicator Tool is increasingly used by organizations to observe conditions at work that can lead to stress (Edwards, Webster,

Van Laar, & Easton, 2008). The full version includes 35 items, and the brief version, in which only items with a factor loading greater than 0.65 were retained, contains 25 items. Responses are given on a 5-point scale from 1 (never) to 5 (always). The tool contains seven subscales: demands, control, relationships, role, managerial support, peer support, and change. A sample question for peer support is: "If work gets difficult, my colleagues will help me," (Houdmont, Randall, Kerr, & Addley, 2013). The peer support subscale measures colleague encouragement and support at work and includes four questions. Questions 7, 24, 27, and 31 reflect this four-item scale and were used in this study. Scores are calculated on a 5-point Likert scale from 1 = never to 5 = always. Scores range from 4–20. Cronbach's alpha reliability is .82.

Nursing Practice Environment is defined as influences that improve or lessen a nurse's capacity to practice nursing competently and deliver high-quality care (Swiger et al., 2017). The nursing practice environment was measured by the Practice Environment Scale of the Nursing Work Index (PES-NWI) (Lake, 2002). The 31-item PES-NWI, developed from the Nursing Work Index, is used to measure influences in the work environment that support or lessen a nurse's capability to deliver quality care (Lake, 2002; Swiger et al., 2017). The instrument has five subscales: participation in hospital affairs (nine items), foundations for quality of care (10 items), leadership ability and support for nursing (five items), staff and resource adequacy (four items), and collegial physician-nurses' relationships (three items) (Lang, Patrician, & Steele, 2012). Items are measured on a 4-point Likert-type scale from 1 (strongly disagree) to 4 (strongly agree). A Composite Score is calculated as the mean of the subscales. Internal consistency for

the subscales as well as the Composite Score, as measured by Cronbach's alpha, were from .71 to .84 (Lake, 2002).

Nurse Demographics include the following demographic and employment characteristics: age, years of nursing experience, education level, marital status, and gender. The individual characteristics were measured by a brief demographic survey created by the researcher.

Palliative Care focuses on relief of suffering, psychosocial support, goals of care, and closure near the end of life. The objective is to improve the quality of life of patients who are experiencing chronic, life-threatening, or severe illnesses. The focus is on lessening pain and providing support to patients and their families. "Palliative care nurses" refers to individuals who provide nursing care to hospice and palliative care patients (Strand, Mansel, & Swetz, 2014).

Assumptions

The following assumptions were made for this study:

1. The participants will be open and honest with their answers.

2. Nurses will vary in levels of burnout.

3. Burnout can be self-reported by nurses and measured.

4. Nurses desire a nursing practice environment that offers organizational and coworker support.

Potential Limitations

1. The participants may not answer questions honestly.

2. Response rates may be low.

3. Respondent bias; i.e. certain groups will be more likely to respond to the survey.

4. Social desirability in responses.

5. Exploratory research may not be generalizable to the population at large.

Summary

The effects of burnout on nurses' health and workplace well-being have been well documented. This study addresses a gap in the literature by examining the influence of POS, coworker social support, the nursing practice environment, and nurse demographics on burnout in palliative care nurses, an area where research is sparse. The research is needed to understand which variables are associated with burnout among a national sample of palliative care nurses, a subspecialty likely to be especially prone to burnout.

This dissertation is presented in five chapters. This chapter presented an introduction of the study, statement of the problem, background, and significance of the study, purpose statement, theoretical framework, specific aims, research questions, and operational definitions. The second chapter covers an integrative review of the relevant literature addressing the burnout construct, the antecedents and consequences of burnout, burnout among palliative care nurses, the role of organizational support and coworker social support, the nursing practice environment, and nurse demographics. Chapter 3 provides a detailed description of the methodology utilized in the study to address the specific aims and answer the research questions. Results of data analyses are reported in Chapter 4, and Chapter 5 presents the conclusions drawn from the analysis and recommendations for future studies.

CHAPTER 2

LITERATURE REVIEW

The purpose of this literature review is to synthesize existing studies of burnout and address the importance of the problem and research questions. Topics covered include burnout, perceived organizational support (POS), coworker social support, and the nursing practice environment. The theoretical model is explained in detail. Relevant gaps in the literature will also be addressed.

Burnout

The term *burnout* was originally introduced into the psychosocial literature in the mid-1970s by Herbert Freudenberger (1974), a clinical psychologist acquainted with stress responses displayed by staff members in institutions such as free clinics and halfway houses. Freudenberger's depiction of burnout referred to perfectionistic young adults who worked hard and sacrificed their well-being, while receiving very little appreciation or compensation (1974). Freudenberger described burnout as a feeling of disappointment and being worn out (DeSilva, Hewage, & Fonseka, 2009).

Christina Maslach, a social psychologist, further refined the concept of burnout while studying feelings in the workplace and defined it as an extended reaction to chronic emotional and interpersonal stress at work, characterized by the three dimensions of emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach & Jackson, 1981). Careers such as nursing, where individuals must work closely with

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people, may cause feelings of overextension and result in emotional exhaustion (Leiter & Maslach, 2015; Maslach, 2003; Meier & Beresford, 2006). Another distinguishing characteristic of burnout is a negative attitude toward the beneficiaries of one's services. This has been termed "cynicism" or "depersonalization" (Maslach, 2003; Maslach & Jackson, 1981). Reduced personal accomplishment is an overall feeling of dissatisfaction about accomplishments on the job (Maslach & Jackson, 1981).

Despite the growing consensus surrounding the topic of burnout, the difference between burnout and stress has not always been clearly defined (Cordes & Dougherty, 1993). Hemamalini, Ashok, and Sasikala (2018) define stress as a person's emotional and physical reaction to the perception of a demand or challenge. Burnout, however, is a response to chronic work-related stress. Although early descriptions of burnout were vague, it is now acknowledged as a psychological syndrome in response to chronic interpersonal stressors on the job and has its own ICD-10 code classification (DeSilva et al., 2009).

Maslach and Leiter (1997) suggested that burnout falls on a continuum from burnout to engagement with work. This continuum has three dimensions: energy, involvement, and effectiveness. Burnout is characterized by a low drive (exhaustion), low participation (depersonalization or cynicism), and low effectiveness (Maslach & Leiter, 1997; Rizo-Baeza et al., 2018; Van Bogaert et al., 2014). Employment in healthcare often necessitates the ability to manage difficult situations arising in hospital settings, while providing treatment and care to patients and families recovering from complex illnesses (Gómez-Urquiza, 2017). Burnout in nurses affects not only the individual but also patients and the healthcare organization as a whole (Braithwaite,

2008). In addition, work environments specific to nursing have traditionally involved

specific job stressors, such as heavy workloads, inadequate resources, and lack of support

from managers (Aiken et al., 2001). Therefore, nursing has been identified to be a high-

risk profession for burnout (Adriaenssens, De Gucht, & Maes, 2014; Cañadas-De la

Fuente et al., 2015; Wang et al., 2015).

The prevalence of burnout varies by study. Cañadas-De la Fuente et al. (2015), in

a study of 676 nurses from public health centers, found the average emotional exhaustion

score was 17.96 (SD = 10.97): 41% of the participants had a low level of emotional

exhaustion; 34% had a medium level; and 25% had a high level. Because of this

exhaustion, nurses may develop a depersonalized and cynical approach toward patients

and families (Cañadas-De la Fuente et al., 2015; Galletta et al., 2016). Data on

depersonalization in nurses is controversial, and results are conflicting. Furthermore,

male nurses were found to have higher levels of depersonalization than female nurses

(Cañadas-De la Fuente et al., 2015). The exposure of nurses to life-and-death decisions

may end in moral distress and ethical stress, which can lead to burnout (Department for

Professional Employees, 2016).

Antecedents of Burnout

The phenomenon of burnout is a major concern for both employees and

organizations. Burnout is largely a workplace phenomenon and is classically caused by

job-related factors. Although researchers identified several job-related influences, such

as workload, reward, fairness, and value, that may directly affect the extent to which

employees experience burnout, few studies account for worksite characteristics or individual circumstances (Dyrbye, 2017; Maslach & Leiter, 2017; Roach, 1994).

Constant stress, both physical and psychological, can lead to burnout. Early studies suggested that emotional exhaustion appears first, resulting from extreme prolonged work demands, thus draining emotional resources (Maslach & Jackson, 1982). Work factors that precede burnout are multifaceted. Mental exhaustion appears to be the leading response to stress and is the most evident symptom of burnout. Research indicates nurses are especially susceptible to burnout because of their constant contact with patients and families, extended shifts of 12 hours or longer, and heavy workloads (Pavelkova & Buzgova, 2015). The increasing work pace, high demands placed on team members, and distress caused by working with patients with life-limiting illness can place palliative care nurses, in particular, at a high risk for burnout (Pienaar & Bester, 2011; Stimpfel, Sloane, & Aiken, 2012; Van Bogaert et al., 2013). According to a report released by the Department for Professional Employees in 2016, many registered nurses believe their day-to-day workloads are instrumental in causing burnout.

Consequences of Burnout

The consequences of burnout are numerous. The hypothesized consequences of burnout include those relating to employee characteristics, job features, management practices, and employees' psychological and behavioral reactions (Roach, 1994). Relationships have been documented between burnout and the incidence of musculoskeletal disorders, depression, obesity, sleeplessness, alcohol intake, and drug abuse among nurses (Poghosyan, Aiken, & Sloane, 2009). Other consequences of

burnout include absenteeism, tardiness, vague somatic symptoms, clashes within the workplace, and subsequent job turnover or career departure, as well as anxiety and lack of motivation (Dall'Ora, Griffiths, & Ball, 2016; Laschinger & Fida, 2014; Lu & While, 2019). Burnout is a particularly catastrophic endpoint for professionals who entered the employment with optimistic outlooks, enthusiasm, and a commitment to helping individuals (Maslach & Goldberg, 1998).

Mentally exhausted employees tend to detach themselves from their work emotionally and cognitively in order to cope. Furthermore, nurses experiencing burnout tend to neglect their work or decide to resign from the job (Basar & Basim, 2016; Maslach et al., 2001). Neglect may appear subtly in the form of distracted behavior, such as lack of caring, or more overtly, as in avoiding or even abandoning work (Basar & Basim, 2016; Farrel, 1983; García-Campayo, Puebla-Guedea, Herrera-Mercadal, & Daudén, 2016). To cope with burnout, individuals may separate themselves psychologically and limit their relationships with others. As a result, individuals may experience a feeling of inadequacy regarding their job performance or relating to people (Maslach & Jackson, 1982).

Very few studies have linked organizational structure and processes to burnout. However, Nantsupawat, Nantsupawat, Kunaviktikul, Turale, and Poghosyan (2016) showed that nurses who experienced inadequate staffing and other resources in the practice environment exhibited signs of emotional exhaustion, depersonalization, and diminished personal accomplishment. Those feelings resulted in poor attitudes and apathy toward their jobs; hence, their job performance worsened, and patient outcomes were threatened.

Job burnout for nurses is influenced by not only job conditions but also leadership behaviors from immediate supervisors, as well as perceived support from the organization (Aiken et al., 2002; Woodhead, Northrop, & Edelstein, 2016). The role of leadership in creating work environments that prevent or impede the development of employee burnout, particularly in relation to cynicism, has been explored (Green, Miller, & Aarons, 2013). Transformational leaders help to reduce emotional exhaustion and turnover intention by strengthening group cohesion, increasing organizational commitment, providing support and motivation, and rewarding employees (Green et al., 2013; Stordeur, D'hoore, & Vandenberghe, 2001).

Lee and Ashforth (1996) found that inter-unit conflict, communications, and influence are work-related processes associated with nurse burnout. Expanding the scope of their study, these researchers examined the role of work-unit structure and processes. The results demonstrated that the impact of "macro" variables on the individual was partially mediated by "micro" variables (Lee & Ashforth, 1996). Stimpfel, Sloane, and Aiken (2012) found that longer shifts were associated with a greater probability of adverse consequences, such as burnout. Likewise, nurses who worked shifts of 12 hours or more were more likely to report burnout and their intent to leave a job, when compared to their colleagues who worked shifts that were 8 hours or less (Dall'Ora et al., 2016). The findings contribute to the body of research associating nurses' shift length with burnout. Because nurses may underestimate how long it takes them to recuperate from long, intense work schedules, they continue to work intensively and may not recognize signs and symptoms of stress in themselves (Stimpfel et al., 2012).

Nurses working in palliative care expressed concerns about their work environment, particularly caring for patients with life-limiting illness, because they act as mediators between patients and families (Peterson et al., 2010). Studies of burnout among palliative care nurses are sparse, not focused at the unit level, and the information is inconclusive and/or dated. To address these gaps in the literature, additional research is essential and has important implications for the future sustainability of palliative care nurses, and the patients and families to whom they deliver care, as well as the organization.

Perceived Organizational Support

Perceived organizational support (POS) is defined as the generalized opinions of employees that their organization values their contribution and cares about their well-being (Eisenberger, Huntington, Hutchinson, & Sowa, 1986; Kurtessis et al., 2017). Evidence indicates that employees with high levels of POS judge their jobs more favorably, and that POS meets socioemotional needs (Rhoades & Eisenberger, 2002). As a result, employees report increased job satisfaction, a more positive mood, reduced stress, and increased performance (Kurtessis et al., 2017; Rhoades & Eisenberger, 2002).

Several investigators have shown that POS reduces workplace stressors (Eisenberger et al., 1986; Kim, Eisenberger, & Baik, 2016; Rhoades & Eisenberger, 2002), and, therefore, may reduce burnout. Creating favorable circumstances at work, manager support, appropriate rewards, and equality in the workplace may lead to higher self-esteem, empowerment, and individual growth of employees (Kurtessis et al., 2017; Yaghoubi, Pourghaz, & Toomaj, 2014), as well as low levels of burnout.

Laschinger, Purdy, Cho, and Almost (2006) tested a model derived from the theory of POS using a descriptive, correlational survey design with a sample of 346 first line nurse managers working in Ontario, Canada. They demonstrated that the organizational characteristics most strongly related to POS were rewards ($r = 0.64$), respect, ($r = 0.64$), job security ($r = 0.48$), autonomy ($r = 0.32$), and monetary benefit ($r = 0.32$). Employee attitudes, health outcomes, and performance levels were higher in employees with higher POS. Higher levels of POS were associated with organizational work environments that empowered employees, lower emotional exhaustion, fewer physical symptoms, and higher energy levels. Although POS was more strongly associated with the organizational environment than with individual influences, Higher levels of POS were significantly related to more positive health consequences such as lower emotional exhaustion ($r = -0.39$), higher energy level ($r = 0.28$), and lower physical symptoms ($r = -0.26$) (Laschinger et al., 2006).

Leadership from managers was also found to be a significant factor in POS in one study of 273 nurses from an Italian public general hospital. The study's purpose was to test whether perceived empowerment leadership style of nurse supervisors affected nurses' POS, faith in the leadership, and confidence in the organization or influenced the development of burnout. The study concluded that trust in the organization was influenced by POS and by empowering leadership styles (Bobbio, Bellan, & Manganelli, 2012).

Cao, Chen Tian, and Diao (2016) examined the mediating role of professional self-concept, and the effect of POS on burnout among community health nurses in China. Structural equation modeling was used to examine the relationships among POS,

professional self-concept, and burnout. Thus, POS may result in reduced burnout by facilitating the development of positive professional self-concept.

The relationship between POS, intent to remain in a job, and job performance is noteworthy. Liu, Yang, Yang, and Liu (2015) investigated the relationships among POS, intention to remain, career success and self-esteem in a sample of workers in China. The results illustrated that self-esteem mediated the relationship between organizational support and career success. Yet another study examined the relationship between POS and performance. The sample included 199 employees of an electronic and appliance sales organization. The authors found that POS was positively associated with a temporal change in extra-role performance (Chen, Eisenberger, Johnson, Sucharski, & Aselage, 2009). Researchers in South Korea examined associations between job satisfaction and burnout, organizational support, and quality of care among registered nurses. Job dissatisfaction was positively correlated with burnout scores and lack of organizational support (Kwak, Chung, Xu, & Eun-Jung, 2010). Evidence found that POS promotes affective commitment, which increases well-being and reduces lack of alternatives (Panaccio & Vandenberghe, 2009). POS has been found to be associated with positive affective responses in employees (Kim et al., 2016; Rhoades & Eisenberger, 2002)

In summary, it is unclear based on the literature whether POS is more likely among palliative care nurses, and whether this influences palliative care burnout. More studies are needed to investigate whether burnout is influenced by POS.

Coworker Social Support

Social support is defined as the combination of social relationships, emotional and behavioral interactions, and an individual's perception about the adequacy or availability of different types of support. Social support involves empathy, care, love, and trust. Moreover, people tend to have less stress and are more satisfied with their jobs when they feel supported by their peers (Button, 2008; Van Pelt, 2008). According to Hamaideh, Myrayyan, Mudallal, Faouri, and Khasawneh (2008), sources of *coworker social support* stem from the work environment (supervisors, colleagues, and coworkers) as well as from family members, spouses, and friends. Support from coworkers is less frequently studied than organizational support. It is significant to understand how coworker social support may impact burnout in nurses.

Conflicting results exist in various studies regarding coworker social support and burnout. Amarneh, AbuAl-Rub, and AbuAl-Rub (2009) found high levels of emotional exhaustion and moderate levels of depersonalization and personal accomplishment in a group of Jordanian nurses. Job satisfaction and coworker social support scores were slightly higher than the midrange. Perceived coworker social support improved the level of stated job performance ($r = .40$; $p < 0.001$) (Amarneh et al., 2009). A negative correlation between job stress and coworker social support among hospital nurses was reported ($r = -.10$, $p < .01$), indicating that participants who perceived having more social support from coworkers experienced less job stress (AbuAlrub, 2004). Barnard et al. (2006) explored work stressors, work support, and burnout in inpatient oncology nurses in the United States. There was a weak correlation between burnout and work support only ($r = 0.22$). Thus, the hypothesis that burnout was mediated by perceived work

support was not supported. The findings also revealed that most work support came from peers, followed by supervisor support; less support came from the organization. Most of the support was informational, followed by emotional support. Yet when Kalicińska, Chylińska, and Wilczek-Różyczka (2012) examined the relationship between burnout and social support among hospice nurses and midwives they did not find significant differences. Conflicting studies have not conclusively determined whether coworker social support is instrumental in decreasing or preventing burnout.

Research involving palliative care nurses is limited regarding coworker social support. The studies available provide information on the team approach in palliative care. This team approach involves a multidisciplinary team, which includes physicians, social workers, and chaplains (Strand et al., 2014). Data concerning palliative care staff and social support suggest support of the team is a basic coping strategy in this population (Strand et al., 2014). Because of limited studies of social support in palliative care nurses, it is important to validate the findings from the literature on the role of coworker social support from a palliative care perspective (Kalicinska et al., 2012). The results would contribute to a better understanding of the phenomenon of burnout in this population. Future studies should focus on determining if adequate coworker social support in palliative care has a significant role in reducing the occurrence of burnout.

<div align="center">The Nursing Practice Environment</div>

The *nursing practice environment* is defined as influences that improve or lessen a nurse's capacity to practice nursing competently and deliver high-quality care (Swiger et al., 2017). The nursing practice environment differs from POS in that the nursing

<div align="center">31</div>

practice environment focuses on the nurse experience of the work environment at the point of nursing care delivery, or the unit level (Hoffart & Woods, 1996; Lake, 2002; Olds et al., 2017). POS is the employees' perception of the magnitude to which the employer values their contributions and is concerned about their well-being (Allen & Shanock, 2013; Rhoades & Eisenberger, 2002).

A large body of literature exists that describes the relationship between the work environment and burnout. The studies used different measurement instruments, but the findings were comparable. For example, in 1997 Melchior, Bours, Schmitz, and Wittich found significant relationships when burnout and the work environment were analyzed at the nurse level and, separately, at the nursing unit level. Van Bogaert et al. (2009) explored the nursing unit level relationship between work environment and burnout by utilizing a two-level linear mixed model for each of the three burnout dimensions; they found the importance of unit level conditions in nurses' work lives to be vital in the prevention of burnout. Liu, Mitchell, Lee, Holtom, and Hinkin (2012) used logistic regression modeling to conclude that improving unit level work environments from poor to better led to a moderate (33%) reduction in emotional exhaustion related to the job.

Nurses value work environments that support their capability to provide high-quality patient care, consistent with the morals of their profession (Leiter & Laschinger, 2006). Several studies document the influence of a favorable nursing practice environment on lower nurse burnout (Aiken, et al., 2011; Van Bogaert et al., 2009; Van Bogaert et al., 2013). For example, nurses who work in magnet hospitals with good practice environments have lower burnout levels, better job satisfaction, and lesser turnover rates than nurses who work elsewhere (Aiken et al., 2001; Aiken et al., 2011).

These environmental factors help to improve outcomes for the patients, nurses, and the organization (Aiken & Patrician, 2000).

Studies confirm that nurses whose work environments are supportive of professional practice have lower levels of burnout (Aiken et al., 2001). Nurses who perceive they have greater autonomy, good work relationships, control, and organizational support have lower levels of burnout and are more satisfied with their jobs (Needleman et al., 2011). Higher levels of teamwork among nurses at the unit level are also associated with lower burnout levels (Kanai-Pak, Aiken, Sloane, & Poghosyan, 2008; Rafferty et al., 2001; Van Bogaert et al., 2014).

Nurses who describe added support from managers, improved staffing, and more optimistic communications with nurses and physicians have lower levels of burnout (Van Bogaert et al., 2010), while nurses who are dissatisfied with their jobs, tend to leave them (Aiken et al., 2001; Aiken et al., 2002). Many studies support the significance of practice environments that involve nurses, support nurses, and address the difficulties of ever-changing healthcare settings (Aiken et al., 2001; Aiken et al., 2002; Swiger et al., 2017).

The Practice Environment Scale of the Nursing Work Index (PES-NWI) is the most frequently used instrument to measure the nursing practice environment (Swiger et al., 2017). The nursing practice environment has been assessed in many acute care settings, such as oncology, medical-surgical, mental health, the emergency room, and intensive care units (Havens, Warshawsky, & Vasey, 2012). No studies of the nursing practice environment have been conducted on palliative care units, thus indicating a need for such a study.

Nurse Demographics

Results from numerous studies regarding the effect of age and years of experience on employee burnout are inconsistent (Ang et al., 2016; Brewer & Shapard, 2004). Sacco, Ciurzynski, Harvey, and Ingersoll (2015) found that nurses 40 to 49 years old had a higher incidence of burnout than younger groups, while Berger, Polivka, Smoot, and Owens (2015) found nurses 18 to 39 years old had higher levels of burnout compared to those over age 40. In another study, personal characteristics of the patient care staff were found to be significant factors affecting burnout. Keidel (2002) examined culture, race, sex, age, stage of disease, spiritual philosophy, education, and financial status, and found that these personal factors influence development of staff burnout. Results of this case study support the theory that nurses need adequate support to prevent the onset of burnout, especially novice or less experienced nurses.

Burnout usually occurs early in one's career, within the first 1 to 5 years. Many young nurses experiencing burnout leave the nursing profession. Using the Maslach Burnout Inventory (MBI), higher levels of emotional exhaustion were seen in younger nurses in their 20s than those in their 30s (Ohue, Moriyama, & Nakaya, 2011). Maslach (2003) found burnout to be less common among older individuals because they are inclined to be more unwavering and have a more well-adjusted life. However, significantly high levels of emotional exhaustion were found in nurses over 40 with a work history of more than 15 years (Quattrin et al., 2006).

New nurse graduates are especially vulnerable to burnout; 66% of new graduate registered nurses experience severe burnout, mainly associated with their negative work environments (Cho, Laschinger, & Wong, 2006; Laschinger, Grau, Finegan, & Wilk,

2010). New graduate nurse burnout is significantly correlated with absence of supervisor support, challenging workloads, and intentions of leaving the job or turnover (Spooner-Lane & Patton, 2007). Similarly, Leiter et al. (2009) found that younger professionals experience higher levels of burnout compared to older professionals. In a study to contrast burnout, turnover intention, value congruence, and knowledge sharing between Generation X and Baby Boomers, Generation X nurses experienced more signs of burnout and had higher intentions of turnover than the Baby Boomers (Leiter et al., 2009).

According to Amarneh et al. (2009), demographic variables and coworker support explain 20% of the variation in job performance, decreased levels of job stress, and enhanced work commitment. Further studies on the relationship of age to burnout are needed to resolve conflicting research. In addition, limited studies have examined the relationship between age and burnout in palliative care nurses.

Barnard et al. (2006) found higher levels of burnout were reported among nurses with higher levels of education, possibly because of the expectations associated with advanced education and job choices. Alternatively, perhaps more-educated individuals have greater expectations for their jobs and are more distressed if those expectations are not met (Maslach et al., 2001). De Paiva et al. (2017) found emotional exhaustion was not associated with education level in nurses, but depersonalization showed a significant association. Rather, emotional exhaustion was associated with education level in nurse technicians. It is possible that people with higher education levels have occupations with more responsibility and may experience higher levels of stress, leading to burnout (Maslach et al., 2001).

Because of inconsistent reports, the appropriateness of approaches to addressing burnout is inconclusive and may depend on whether age or years of experience is a factor related to burnout among palliative care nurses. If younger employees are more likely to experience burnout than older employees, it may be beneficial to take proactive measures against burnout, thus aiding younger employees in developing coping skills. Additional studies are needed to determine if years of experience have a vital impact on whether a nurse is prone to experiencing burnout.

According to the United States Census Bureau (2018), 9% of the nurse workforce is male, and 91% is female. Currently, there are 563 male Hospice and Palliative Nurses Association (HPNA) members. Of that number, approximately 28% work in palliative care. There are limited studies on gender differences in burnout, and most have reported no effect. For example, in Nigeria, Gandi et al. (2011) determined there were no gender differences in burnout levels among nurses. This lack of significant gender difference regarding burnout might exist because men and women in Nigeria have comparable working conditions. When social support is lacking, the men respond by separating themselves from patients, whereas women appear to have more sources of support that buffer the stress.

Ushiro and Nakayama (2010) examined the relationship between gender roles, attitudes of nurses, and burnout in Japan. The conservative gender role attitude not only demonstrated a direct positive effect on burnout but also had a direct negative effect on the intent to continue working and on the collaboration constructs of cooperation, especially with physicians. The study found a direct positive effect on burnout in nurses with a strong independent gender role attitude who were highly inspired and dedicated to

their work. Duquette et al. (1994) examined relationships between burnout and demographic factors such as gender, and concluded gender does not play a role in the development of burnout in nurses. Using the MBI in a survey of 336 nurses from eight hospitals, higher levels of emotional exhaustion were seen in female nurses than in male nurses (Ohue et al., 2011).

A major gap in the literature exists regarding gender differences in experiences of burnout. Many of the studies regarding the differences between male and female nurses have been conducted outside the United States. Because of contradictory reports, future research should evaluate gender differences in nurse burnout levels in the United States. There is some evidence that social support has a different pattern of influence on males than females; however, social support has been shown to benefit emotional and physical health for both genders (Thoits, 2011). Further research should explore the effect of demographic variables, including age, years of nursing experience, education level, marital status, and gender.

Theoretical Framework

Modified versions of both the Maslach burnout theory and Eisenberger's POS theory, and Donabedian's (1966) structure, process, and outcome framework underpin this study. In the study, burnout is the dependent variable and POS and social support from coworkers are added to the conceptual model as potential moderator variables. (See Figure 1.)

POS was examined as a potential moderator to determine whether it increases, decreases or does not affect the relationship between age and burnout; years of nursing

experience and burnout; and education level and burnout. The same analysis was repeated to examine coworker social support as a potential moderator of nurse demographics and burnout. Adding the variables as moderators will advance burnout science and address the essentials of how and for whom interventions achieve their effects (MacKinnon, 2011). It has been well documented in the literature that nurse practice environment dynamics are related to nurses' burnout occurrences (Laschinger & Leiter, 2006). By adding the nurse practice environment to the model and exploring the relationships of the PES-NWI, POS, and coworker social support to burnout, the research will add to this body of knowledge.

The Maslach burnout theory gives detailed information about the definition and causes of burnout, as well as risk factors (Maslach & Jackson, 1981; Maslach & Leiter, 2017). Maslach's theory is based on the idea that a person's degree of job burnout is related to his or her work environment (Maslach & Jackson, 1981; Maslach & Leiter, 2017). Initially, Maslach's research did not emphasize burnout, but rather concentrated on relationships between individuals providing and receiving care. This initial focus eventually developed into a concentration on work-related burnout.

According to Maslach, burnout is a result of a misalliance between the person doing the job and the strains of the job. According to this theory, burnout has three dimensions, which are: emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach et al., 2001). Emotional exhaustion is the most noticeable of the three dimensions. Most people who experience burnout can identify exhaustion without difficulty. Characterized by emotional stress, related symptoms may include grumpiness, frustration, and anxiety. Personal accomplishments may decline because of

emotional exhaustion. This theory also indicates that burnout can have other negative consequences, such as poor job performance, turnover, and negative impact on colleagues, which may result in conflict. Poor job performance may be a result of continued work despite experiencing burnout (Maslach & Leiter, 2017; Maslach et al., 2001).

To evaluate quality, the structure-process-outcome approach pioneered by Donabedian has been used in health services research for many years (Donabedian, 1966; Smith, Morin, & Lake, 2018). According to Donabedian, structure includes constant characteristics that simplify the provision of health services (Hearld, Alexander, Fraser, & Jiang, 2008). Structure factors are resources needed to deliver care, such as staff, equipment, training, and setting. Other examples of structure factors are: size, level, and type of staffing; hours per shift worked; day-to-day workload; unit type; organization or hospital size; and physical condition of the workplace (Hearld et al., 2008).

Process factors are interpersonal activities or interventions related to care delivery (Flynn, 2005). Examples of organizational processes include leadership, collaboration, and communication with coworkers and managers (Hearld et al., 2008; Shimizu, Feng, & Nagata, 2005). According to Donabedian's model, both structure and process factors are necessary for organizations to achieve positive outcomes (Flynn, Carryer, & Budge, 2005). The nursing practice environment was added to the model as a process variable to determine if nurses who had a positive work environment had a lower incidence of burnout. Poor organizational support has been shown to increase stress levels at work and increase burnout (Johansen & Cadmus, 2016).

Eisenberger's POS theory, an application of social-exchange theory to the employer-employee relationship (Rhoades & Eisenberger, 2002), proposes that as employees perceive more support from the organization and coworkers, their emotional and psychological stressors decrease, perhaps decreasing burnout (Allen & Shanock, 2013; Eisenberger & Huntington, 1986).

POS strongly affects an employee's belief in their organization's good or bad intentions toward them and can affect whether the employee feels that they are being treated favorably or unfavorably (Rhoades & Eisenberger, 2002). If employees feel supported, there is an obligation to help the organization meet set goals and objectives (Rhoades & Eisenberger, 2002). The expectation is that increased efforts by the organization lead to greater rewards. Socio-emotional needs are also filled by POS, thus resulting in increased desires to help the organization to succeed and an enhanced psychological well-being (Rhoades & Eisenberger, 2002).

Conceptual Model

| Structure | Process (Context) | Outcome |
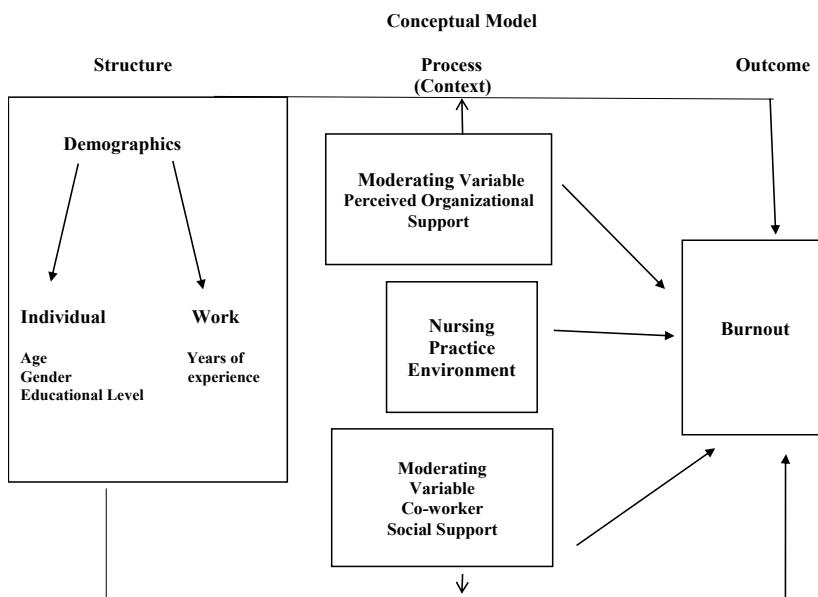
Figure 1. Diagram of modified theoretical model.

Summary

This chapter discussed the history, antecedents, and consequences of burnout. It also reviewed the literature on POS, coworker social support, and the nursing practice environment and their relationships to burnout. In addition, the known associations between nurse demographics and burnout were reviewed. Researchers have found that low levels of POS, coworker social support, and poor ratings of the nursing practice environment contribute heavily to the development of burnout in nurses, whereas high levels of POS, coworker social support, and favorable nursing practice environments may prevent burnout from occurring.

A channel for expressing frustration or receiving positive feedback from managers, which might alleviate stress, may not be available. In contrast, positive relationships with coworkers and managers, and the resultant social support, were all found to be protective factors against burnout (Shimizu et al., 2005). Practice environments that provide nurses with access to and control of resources, information, and opportunities to grow appear to empower them, thus leading to more engagement, less stress, less burnout, and better organizational outcomes (Van Bogaert et al., 2010).

One gap noted in this body of literature is the lack of studies on palliative care nurses, who may be at higher risk of burnout by the very nature of their jobs. Research is needed to identify and understand the demographic antecedents of job burnout for palliative care nurses and their relationships to POS, coworker social support, and the nursing practice environment. Research related to the relationships of nurse demographics of age, years of nursing experience, education level, marital status, and

gender is limited and inconclusive; it has not been determined whether those factors affect the onset of burnout.

Results reporting that coworker social support reduces burnout are limited by their descriptive, cross-sectional, and non-randomized methodologies. Little to no current research has been conducted on the variables of POS, coworker social support, the nursing practice environment, and nurse demographics within this specialty of palliative care.

The purpose of this dissertation is to examine the influence of POS, coworker social support, the nursing practice environment, and nursing demographics on burnout in palliative care nurses. Communication and application of information about nursing burnout is essential for prevention. Additional research is essential to work toward renewed and innovative interventions for burnout prevention (Maslach & Leiter, 2017). Chapter 3 describes the research methodology used in this study to address the specific aims and research questions.

CHAPTER 3

METHODOLOGY

Research Design

This is a cross-sectional, exploratory, correlational design, using an online survey. This design was selected because of the need to explore relationships among burnout, perceived organizational support (POS), coworker social support, the nursing practice environment, and nurse demographics in a national sample of palliative care staff nurses (Polit & Beck, 2012). The design is the most appropriate method to gather data from a large population, such as a national sample of palliative care nurses (Polit & Beck, 2012). An exploratory study explores the research topic with varying levels of depth. Exploratory research tends to challenge new problems in which there is little or no previous research (Tabachnick & Fidell, 2013).

Purpose and Aims of the Study

The purpose of the study is to examine the influence of POS, coworker social support, the nursing practice environment, and nurse demographics (age, years of nursing experience, education level, marital status, and gender) on burnout in a national sample of palliative care nurses. The aims of the study are:

Aim 1: To examine the influence of POS, coworker social support, and nursing practice environment on burnout in palliative care nurses.

<u>Aim 2:</u> To examine the influence of age, years of nursing experience, education level, marital status, and gender on burnout in palliative care nurses.

<u>Aim 3:</u> To examine potential moderators (POS and coworker social support) on the relationship between demographic characteristics and palliative care nurse burnout.

Research Questions

This study has the following research questions:

RQ1. What is the level of burnout in a national sample of palliative care nurses?

RQ2. Do POS, coworker social support, and the nursing practice environment influence palliative care nurse burnout?

RQ3. Do individual and work characteristics (age, years of nursing experience, education level, marital status, and gender) influence burnout in the palliative care nurse?

RQ4. Does POS or coworker social support moderate the relationship between age and burnout?

RQ5. Does POS or coworker social support moderate the relationship between years of nursing experience and burnout?

Sample and Setting

Inclusion/Exclusion Criteria

The inclusion criteria for this study were: (a) palliative care registered nurses (RNs) who provide direct care to patients and (b) are able to speak, read, and write in English, who (c) have a minimum of 1 year of nursing experience, (d) are age 21 years or older, and (e) are members of the Hospice and Palliative Nurses Association (HPNA).

The exclusion criteria were: licensed practical nurses or licensed vocational nurses, nurse

managers, and other nurses who are not in direct patient care.

Sample Size Justification

According to Hinkle, Wiersman, and Jurs (2003), larger sample sizes decrease the

chance of sampling error. Numerous methods exist to determine the minimum number of

subjects required to conduct multiple regression analyses (Hinkle et al., 2003). The

standard statistical power of 80% and a significance level of 0.05 (two-sided test) was

used because both are standards in the social sciences (Polit & Beck, 2012). For this

study, a power analysis was performed using G*Power 3.1 software to determine an

adequate sample size. With an alpha of 0.05, a power of 0.80 and a medium effect size

(0.5), using eight predictors, the minimal sample size was 107. Because Web-based

questionnaires often can have response rates as low as 25%, oversampling by 75% was

planned (Dillman, 2011). A sample of 428 nurses was invited in order to obtain a

response rate of 25% (N = 107).

Sampling Strategy

Palliative care nurses were recruited from HPNA national membership. The

HPNA is a national society for nurses who are employed in the field of hospice and

palliative care; it has approximately 10,000 members (HPNA, 2019). Of the 10,000

members, 1,899 are palliative care RNs, 3,904 are hospice RNs, 1,991 are both hospice

and palliative RNs, and 162 are retired RNs. The remaining members are LPNs/LVNs,

nursing assistants, student nurses, senior RNs, and associate members. The study setting

took place in an electronic environment of the participant's choice via an online survey.

The HPNA's research department works with investigators to conduct research

and to ensure that members of the organization are not exposed to potentially harmful

studies. After University of Alabama at Birmingham (UAB) Institutional Review Board

(IRB) approval, the HPNA Research Department and Research Advisory Council were

provided the UAB IRB approval letter and an abstract of the study.

Procedure

After receipt of approval by the UAB IRB and the HPNA Research Advisory

Council, all staff RNs who were direct care providers in November 2018 with available

electronic email addresses were invited to participate in an electronic online survey

through Qualtrics. Qualtrics is an Internet program and hosting site that allows for the

development and conduct of surveys over the Internet (Qualtrics, 2018). Qualtrics

provides the data to the researcher stripped of all personal email identifiers, is free to

UAB students, and has the capability to survey over large demographic areas (Qualtrics,

2018). A test of the electronic survey was completed from June 2018–July 2018 by the

researcher, two dissertation committee members, and five nurses from a local hospital.

The purpose of the test was to validate the time to complete the survey, to ensure the

questions were easy to understand, and to determine if there were any identifiable

problems.

The Dillman method of survey data collection was initially thought to be the best

method because it results in the maximum accrual of survey returns in comparison to

other methods (Dillman, 2011). As recommended by Dillman (2011), it was planned that a survey reminder would be emailed to participants two weeks after the initial invitation to participate and a second email reminder would be repeated two weeks later. However, due to a change in HPNA's research policy, the researcher was not allowed to obtain the members' email or home mailing addresses. Therefore, the Dillman method was not used for this study.

One month prior to the invitation to participate in the study, an announcement was sent to the HPNA's Director of Research. During the months of November and December 2018, the invitation to participate was placed in the HPNA's monthly electronic newsletter (Appendix A), and a mass email was sent to each member of the 20 HPNA special interest groups (SIGs). Members may belong to more than one HPNA SIG (HPNA, 2019). The invitation to participate in the study and the electronic link to open the online survey remained activated from November 2018 until April 2019. The invitation to participate provided the title of the study, the purpose of the study, the researcher's contact information, the time estimate for completion of the survey, and the electronic link to gain access to the survey.

The researcher placed the invitation to participate in the study on social media via HPNA's Facebook page, a personal Facebook page, and LinkedIn. Each HPNA chapter president with a valid email address was sent the invitation to participate and asked to forward the information to their chapter members. An invitation to participate flyer was displayed at the HPNA Annual Assembly from March 14–16, 2019, at the UAB School of Nursing's vendor table. Finally, the invitation to participate was placed in the March 2019 HPNA monthly electronic newsletter. The survey was closed on April 3, 2019.

Protection of Human Subjects and Consent

The researcher obtained permission to conduct the study from the UAB IRB and from the HPNA Research Advisory Council. Completion of the survey was confirmation of consent to participate. The introduction letter informed participants they could withdraw from the study at any time prior to submission without any penalty, and withdrawal from the study would not affect their good standing with the HPNA. There were no known physical risks for this study. It was considered that answering questions in relation to burnout could lead to minor emotional stress. If participants experienced any emotional stress and wanted to speak with a counselor, they were directed to contact Dr. Kay Knowlton or Dr. Sylvia Huang for consultation and referral information regarding counseling support. Dr. Knowlton is a counselor and Dr. Huang is a psychologist with Palliative Care Counseling Services at UAB. Both phone numbers and email addresses were provided in the letter of introduction (See Appendix D.)

Participants were not offered compensation. However, the researcher emphasized that participation would contribute to the current literature on burnout in palliative care nurses.

The researcher used Qualtrics for electronic data collection, which offers protection and the capability to conduct research with incomparable safekeeping, trustworthiness and compliance (Qualtrics, 2018) (See Appendix D.) Qualtrics protected the confidentiality of participants' answers and identifying information, and did not display their names on the surveys. Findings were presented in aggregate form. Only the researcher and dissertation committee members had access to the data, which were deidentified. All surveys were stored in a password-protected file in Qualtrics.

Instruments

The researcher used five instruments in this study: The Emotional Exhaustion Subscale of the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981), Eisenberger's POS Scale (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002), the Health and Safety Executive (HSE) Management Standards Indicator Tool (Edwards et al., 2008), the Practice Environment Scale of the Nursing Work Index (PES-NWI) (Lake 2002), and a brief demographic survey developed by the researcher.(See Table 1.)

Table 1

Table of Major Variables

Concept	Instrument	Number of Items	Cronbach's Alpha
Burnout	MBI-EE Subscale	7	.71-.80
POS	POS Scale	8	.89
Coworker Social Support	HSE Indicator Tool	4	.82
Nursing Practice Environment	PES-NWI	31	.71-.84
Demographic Survey	Short Demographic Survey	9	N/A

Notes: POS = perceived organizational support; HSE = Health and Safety Executive; MBI-EE Subscale = Maslach Burnout Inventory Emotional Exhaustion Subscale; PES-NWI= Practice Environment Scale of the Nursing Work Index.

Maslach Burnout Inventory

Many validated instruments have been developed to assess burnout; however, the most frequently used is the Maslach Burnout Inventory (MBI), which has been recognized for more than three decades as the gold standard for assessing burnout (Maslach & Jackson, 1982). The MBI assesses each person's experience on a continuum from burnout to engagement with work (Maslach & Leiter, 1997). The MBI was created based on three validated subscales: emotional exhaustion, depersonalization, and personal accomplishment. The seven-item Emotional Exhaustion Subscale describes feelings of emotional fatigue due to work. The depersonalization subscale defines disengaged and impersonal behavior toward patients. It contains five items. The eight-item personal accomplishment subscale defines beliefs of skill and effective accomplishments at work. Maslach recommended that the scores of each subscale be measured independently, due to scant information about the relationship between the three aspects of burnout (Maslach, Jackson, & Leiter, 2010).

The reliability and validity of the MBI subscales have been well established by previous researchers. Maslach and Jackson (1981) investigated the performance of all three MBI subscales and demonstrated that they had good psychometric properties. Cronbach's alphas for each of the three subscales were above 0.71, indicating adequate internal consistency. Test-retest reliability ranges were from 0.60–0.82 (Maslach & Jackson, 1981). Convergent validity was demonstrated in a variety of ways. MBI scores were associated with behavioral scores made by a person who knew the individual well, such as a coworker or a spouse. Next, the MBI scores were correlated with certain job features that were assumed to contribute to burnout. Finally, MBI scores were correlated

with several conclusions that had been hypothesized to be connected to burnout (Maslach & Jackson, 1981).

For this study, the researcher used the seven-item Emotional Exhaustion Subscale. The Emotional Exhaustion Subscale of the MBI is the one most frequently used in burnout research, with a Cronbach's alpha of .71–.80. Most researchers have found it to be the strongest indicator of burnout of the three subscales, and valid as a predictor of burnout (Aiken & Sloane, 1997; Kalliath et al., 2000; Rafferty et al., 2001; Vahey et al., 2004). Summed scores of 27 or higher are indicative of high burnout (Maslach et al., 1996; Van Bogaert et al., 2009). The participants in this study were asked to identify how often they experienced a set of conditions that represented emotional exhaustion only.

Eisenberger Perceived Organizational Support (POS Scale)

Perceived organizational support (POS) is defined as the sense in which employees believe their organization values their contribution and cares about their well-being. A shortened eight-item version of Eisenberger's POS Scale was used to measure POS (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002). This version of the POS Scale was selected because it captures specific questions related to employees' well-being; the use of the eight-item version versus the 36-item version in the literature does not appear to be problematic. This version is frequently used in the POS literature, and prior research confirms an internal consistency reliability coefficient for POS of 0.89. The eight-item survey uses a 7-point Likert scale from 0 (strongly disagree) to 6 (strongly agree). An example item is: "The organization values my contribution to its well-being."

The scores range between 0 and 48, with a mean score of 24. Therefore, the higher the score, the higher the level of organizational support perceived (Rhoades & Eisenberger, 2002). Convergent validity results indicated similar proportions of variance in versions of the POS scores by selected variables (Rhoades & Eisenberger, 2002).

The Health and Safety Executive (HSE) Management Standards Indicator Tool
(Peer Support Subscale)

Coworker social support is defined as the combination of social interactions and emotional and cognitive behavioral transactions at work. Coworker social support was measured with the peer support subscale of the HSE Management Standards Indicator Tool. The HSE Indicator Tool is increasingly used by organizations to screen for working situations that can lead to stress (Edwards et al., 2008).

The original version includes 35 items, and the peer support subscale has four questions. Responses are calculated on a 5-point Likert scale, from 1 (never) to 5 (always). The four-item peer support subscale, which measures colleague encouragement and support at work, was used for this study. (See Appendix H.) An item example is: "I get help and support I need from my colleagues." The mean scores are calculated, with higher scores reflecting higher peer support at work (Edwards et al., 2008). Reports from the literature confirmed the HSE Indicator Tool four-item peer support scale to be psychometrically sound. The HSE Indicator Tool is used by organizations to monitor working conditions that may lead to stress. Cronbach's alpha reliability was .82, indicating the items in the scale are measuring the overall concept. (Edwards et al., 2008). Questions on the peer support scale are specific to coworker support. The shorter

scale was used in this study because the longer version combined with other

questionnaires may have made the instrument long and time consuming to complete.

The Practice Environment Scale of the Nursing Work Index (PES-NWI)

The Nurse Work Index (NWI) is a scale reflecting the organizational

characteristics of environments that appeal to nurses. It is based on an extensive

literature review and findings from the American Academy of Nursing (Lake, 2002). The

31-item PES-NWI was developed from the Revised Nursing Work Index (Aiken &

Patrician, 2000; Lake, 2002). The PES-NWI is an instrument measuring

the nursing practice environment, which is defined by influences that improve or worsen

a nurse's capacity to practice nursing competently and deliver high-quality care (Swiger

et al., 2017). The PES-NWI is the most frequently reported measure used to determine

the state of nursing practice environments (Swiger et al., 2017). The instrument has five

subscales: participation in hospital affairs (nine items), foundations for quality of care (10

items), leadership ability and support for nursing (five items), staff and resource

adequacy (four items), and collegial physician-nurses' relationships (three items) (Lake,

2002). The subscales were supported by confirmatory analyses of current data from

11,636 nurses in Pennsylvania (Lake, 2002). Items are measured on a 4-point Likert-type

scale from 1 (strongly disagree) to 4 (strongly agree). Internal consistency reliability has

been reported to be .71 to .84 (Lake, 2002; Lang et al., 2012). Higher scores of nurses in

magnet versus non-magnet hospitals supported construct validity.

Nurse Demographics Survey

Nurse demographics were obtained from a brief demographic survey developed by the researcher. It elicited information about age, years of nursing experience, education level, years of nursing experience in palliative care, marital status, and gender. Existing literature on burnout tends to focus on the demographic variables of age, years of nursing experience, education level, marital status, and gender. Since palliative care nurses were the population of interest, it was helpful to know the years of palliative care experience. Additional experience may help to reduce burnout (Gama, 2014).

There are other demographic characteristics that may have been useful in this study, such as race, regional location of the nurses, and type and size of the hospital where they were employed. However, additional questions combined with other questionnaires may have made the survey too long and time consuming for participants. The demographic information provided an overall picture of the sample characteristics and allowed for subgroup analysis of potential relationships between demographic variables and burnout in this population of nurses (Burns & Grove, 2004).

<div align="center">Data Analysis Plan</div>

The data for the current study were analyzed using descriptive and inferential statistics. The data from the surveys were entered automatically from Qualtrics into a data file for analysis using the Statistical Package for the Social Sciences (SPSS) for Windows, Student Version 25 (IBM SPSS Statistics for Windows, 2017). An alpha of ≤ .05 was used to indicate statistical significance. The following describes how each aim was analyzed.

Aim 1: To examine the influence of POS, coworker social support, and nursing practice environment on burnout in palliative care nurses.

Aim 2: To examine the influence of age, years of nursing experience, education level, marital status, and gender on burnout in palliative care nurses. To address Aims 1 and 2, the following sequence of analyses was used:

First, the researcher completed descriptive statistics to explore the sample's characteristics and distribution properties of all variables. All variables were examined for frequencies or measures of central tendency. Histograms were run to test for normality. Missing data amounts were calculated for each variable by examining frequency distributions. Data cleaning included assessing for outliers and nonsensical values. Listwise deletion was used for handling missing data through the default method in SPSS (IBM SPSS Statistics for Windows, 2017). For any single value missing, the entire case was excluded from analysis (Polit & Beck, 2012).

Second, the researcher performed Pearson's correlations to determine the strength and direction of associations between variables and to determine if there was an indication of multicollinearity (Burns & Grove, 2004). Multicollinearity occurs when predictor variables are too highly intercorrelated (i.e. $r \geq .60$), leading to unsound and untrustworthy estimates of regression coefficients (Allison, 2012; Polit & Beck, 2012). Pearson's correlation measures linear associations between two variables, resulting in the strength of the relationship. These may be positive or negative (Hinkle et al., 2003). The assumptions of Pearson's correlation coefficient are: 1) interval measurement of both variables, 2) normal distribution of at least one variable, 3) independence of observational

pairs, and 4) homoscedasticity, or the hypothesis that standard deviation distributions are equivalent (Tabachnick & Fidell, 2013).

Third, the researcher performed a standard multiple regression between burnout as the dependent variable (DV), and POS, coworker social support, the nursing practice environment, and nurse demographics of age, years of nursing experience, education level, marital status, and gender as independent variables (IVs). The researcher used multiple regression techniques to determine the robustness of the relationships between the DV and the IVs, then measured the importance of each IV to the relationship (Polit & Beck, 2012). In multiple regression analysis, the relationship between the DV and the linear combination of explanatory variables is summarized by the coefficient of determination (R^2) and adjusted R^2 (Tabachnick & Fidell, 2013). This coefficient, R^2, ranges from 0 to 1 and provides an estimate of the proportion of variability in the dependent variable explained by the linear combination of the explanatory variables. It is also the square of the correlation between the observed values of the dependent variable and the model-predicted value (Polit & Beck, 2012). Adjusted R^2 is reported in addition to R^2 because it accounts for the number of variables in the model (Tabachnick & Fidell, 2013). The researcher performed this analysis using SPSS REGRESSION and EXPLORE for evaluation of assumptions.

Aim 3: To examine potential moderators (POS and coworker social support) on the relationship between demographic characteristics and palliative care nurse burnout. To address Aim 3, the following analyses were used:

The researcher tested a moderation effect using interaction terms. In the proposed study, the emotional exhaustion component of burnout is the DV, and POS and

coworker social support are added to the model as potential moderators of the relationships between the demographic variables (age and years of nursing experience) and burnout. Adding the variables as moderators to a research study advances the scientific research and addresses the essentials of how and for whom interventions achieve their effects (MacKinnon, 2011). Moderation occurs when the relationship between two variables differs, depending on the levels of a third variable. The third variable is referred to as the moderator variable, or simply the moderator. The moderator affects the zero-order correlation between two other variables, or the value of the slope of the dependent variable on the independent variable (Baron & Kenny, 1986). The strength and form of the relationship depend on the value of the moderator variable. In fact, the moderator either strengthens or weakens the relationship (MacKinnon, 2011). The effect of a moderating variable is characterized statistically as an interaction, that is, a categorical or continuous variable that affects the direction and/or strength of the relationship between DV and IVs (MacKinnon, 2011; Wu & Zumbo, 2008).

The moderator variable explains circumstances that cause a weak or vague association between variables projected to have a strong relationship. In a multiple regression model, the moderator variable can be analyzed as one of the independent variables first (Bennett, 2000). Moderator variables can be thought of as the uniqueness of the population, such as male versus female, or of environments, such as rural versus urban, and are critical for understanding the generalizability of a research finding to subgroups (Bennett, 2000; Polit & Beck, 2012).

Initially, the IVs, including the moderator variable, were added into the model as predictors of the outcome variable: burnout. In an isolated step, the interaction term,

which is the product of two IVs and characterizes the moderator effect, was entered in

SPSS (Bennett, 2000). Moderation is supported when the interaction is significant

(Baron & Kenny, 1986). POS was examined as a potential moderator to determine

whether POS increases, decreases or does not affect the relationship between age and

burnout, and years of nursing experience and burnout. The same analysis was repeated to

examine coworker social support as a potential moderator of nurse demographics and

burnout.

Table 2

Independent Variables, Dependent Variable, and Moderator Variables

Variable	IV	DV	Moderator
Burnout		X	
POS	X		X
Coworker Social Support	X		X
Nursing Practice Environment	X		
Age	X		
Years of Nursing Experience	X		
Education Level	X		
Marital Status	X		
Gender	X		

Notes: POS = perceived organizational support; IV = independent variable; DV = dependent variable.

Table 3

Analysis Strategy for Specific Aims

Aim	Strategy
1. To examine the influence of POS, coworker social support, and the nursing practice environment on burnout in palliative care nurses.	Multiple regression analysis
2. To examine the influence of age, years of nursing experience, education level, marital status, and gender on burnout in palliative care nurses.	Pearson's correlations
3. To examine potential moderators (POS and coworker social support) on the relationship between demographic characteristics and palliative care nurse burnout.	Multiple regression analysis moderation analysis

Summary

This chapter provided a detailed explanation of the study methodology. A cross-sectional, correlational design was selected for the study in order to explore a variety of relationships, and because the researcher anticipated a wide range of responses. A sample of the palliative care nurse population was recruited from the HPNA national membership. Five instruments were used in this study. (See Appendix I.) The Emotional Exhaustion Subscale of the MBI was used to evaluate burnout. Eisenberger's POS Scale was used to measure POS. The HSE Management Standards Indicator Tool was used to measure coworker social support. The PES-NWI was used to measure the nursing work environment, and demographics were obtained from a brief demographic survey. The data were analyzed using descriptive and inferential statistics. Pearson's correlations were used to determine the strength of association between variables. The analysis was performed using SPSS REGRESSION and EXPLORE. The researcher

tested a moderation effect to examine POS and coworker social support as moderators, using interaction terms.

The results of this study are presented in Chapter 4. They may lead to improvements in the work environment of palliative care nurses. The findings may indicate the need to develop policies and practice considerations for reducing burnout risks to improve quality of care.

CHAPTER 4

RESULTS

Based on Maslach's burnout theory (Maslach & Jackson, 1982); Eisenberger's

perceived organizational support (POS) theory (Eisenberger & Huntington, 1986);

Donabedian's structure, process, outcome framework theory (Donabedian, 1966); and a

comprehensive review of the literature, the following specific aims and research

questions were posed:

<u>Aim 1:</u> To examine the influence of POS, coworker social support, and nursing practice

environment on burnout in palliative care nurses.

> RQ 1: What is the level of burnout in a national sample of palliative care nurses?

> RQ 2: Do POS, coworker social support, and the nursing practice environment

> influence palliative care nurse burnout?

<u>Aim 2:</u> To examine the influence of age, years of nursing experience, education level,

marital status, and gender on burnout in palliative care nurses.

> RQ3: Do individual and work characteristics (age, years of nursing experience,

> education level, marital status, and gender) influence burnout in the palliative care

> nurse?

<u>Aim 3:</u> To examine potential moderators (POS and coworker social support) on the

relationship between demographic characteristics and palliative care nurse burnout.

> RQ4. Does POS or coworker social support moderate the relationship between

> age and burnout?

> RQ5. Does POS or coworker social support moderate the relationship between

> years of nursing experience and burnout?

The findings of the study are presented in this chapter. Sample characteristics of age, years of nursing experience, years of palliative care nursing experience, education level, marital status, and gender are described. The reliability for the study instruments used for the collection of the study variables are reported. The relationships among the major study variables of POS, coworker social support, the nursing practice environment, nurse demographics and burnout are examined using results from Pearson's correlations and multiple regression analysis. The moderating effect of POS on the relationship between age and burnout, years of nursing experience and burnout, and education level and burnout is described. The same analyses are repeated to examine coworker social support as a potential moderator of nurse demographics and burnout. Finally, a summary of the findings for each specific aim is presented.

Data Screening and Cleaning

The data were exported from Qualtrics to IBM's Statistical Package for the Social Sciences (SPSS) for Windows, Student Version 25 (2017). Prior to analysis, the data were screened for outliers, and none were found. Before performing descriptive and inferential statistical techniques, the researcher performed several analytical procedures. Items making up the Emotional Exhaustion Subscale of the Maslach Burnout Inventory (MBI) were summed, and the Emotional Exhaustion Subscale score was calculated according to MBI scaling protocols. The POS Subscale had questions that needed to be reverse coded. Questions 2, 3, 5, and 7 were reverse coded, and a total score was calculated. (See Appendix G.) The questions ranged from 0 (strongly disagree) to 6 (strongly agree). The questions were recoded 0 (strongly agree) to 6 (strongly disagree).

The validated Health and Safety Executive (HSE) Management Standards Indicator Tool (Peer Support Subscale) measuring coworker social support tool was summed, and a total score obtained. The Practice Environment Scale of the Nursing Work Index (PES-NWI) subscales were calculated to obtain a composite score.

Missing data is a common problem with survey research. Missing data can decrease statistical power, leading to conclusions that are invalid (Polit & Beck, 2012). Listwise deletion was used for handling missing data through the default method in SPSS (IBM SPSS Statistics for Windows, 2017). For any single value missing, the entire case was excluded from analysis (Polit & Beck, 2012)

Sample Characteristics

A convenience sample of 102 registered nurse members of the Hospice and Palliative Nurses Association (HPNA), who self-reported their eligibility for this study, participated. Nurses were invited to participate in an electronic survey through the Qualtrics online survey tool. Participants were provided an information sheet about the survey. (See Appendix D.) Informed consent was determined by completion of the online survey. Twenty-nine surveys were started but not completed and deleted. After deletion of incomplete surveys, a sample of 73 was available for data analysis.

Descriptive and inferential statistics, including means and standard deviations, were computed. The demographics are presented in Tables 4 and 5. The mean age of the participants was 52 (SD = 11.4) years. The participants' ages ranged from 24 to 71 years. Seventy-one (97%) of the participants were female, and two were male (3%). Since there were only two males, gender was dropped from data analysis. Participants who provided

their marital status responses were summarized using frequency distributions. Fifty-one (71%) were married, and six (8.2%) were single. Sixteen did not provide their marital status.

In terms of education, four (5%) participants indicated they had obtained a diploma in nursing, and 17 (20%) reported they had an associate degree. Forty-two (48%) had a bachelor's degree. Fifteen (17%) had a master's degree in nursing. Six (7%) had a master's degree in a field other than nursing. Two (2%) reported a doctorate in nursing practice (DNP), while only one (1%) had a Doctor of Science in Nursing (DSN), Doctor of Nursing Science (DNS), or Doctor of Philosophy (PhD).

Table 4

Sample Characteristics (N = 73)

Variable	Minimum	Maximum	Mean	SD
Age (years)	24	71	52	11.4
Years of Nursing Experience	23	49	29	11.4
Years of Palliative Nursing Experience	0	33	7.9	6.5

Table 5

Sample Characteristics (N = 73)

Variable	Freq	%
Marital Status		
Single	6	8
Married	51	71
Missing	16	21
Gender		

Table 5

Sample Characteristics (N = 73)

Variable	Freq	%
Male	2	3
Female	71	97
Education Level		
Diploma	4	5
Associate	17	20
BSN Nursing	42	48
Master's Nursing	15	17
Master's Other	6	7
DNP	2	2
DSN/DNS/PhD	1	1

Notes: BSN = Bachelor of Science in Nursing; DNP = Doctor of Nursing Practice;
DSN = Doctor of Science in Nursing; DNS = Doctor of Nursing Science;
PhD = Doctor of Philosophy.

Instrument Reliability

To estimate internal consistency of the survey and instruments in this study,

Cronbach's alphas were calculated and reported in Table 6. Cronbach's alpha

coefficients ranged from .89 to .99 for all instruments, indicating acceptable reliability.

Table 6

Cronbach's Alpha Coefficients for Self-Report Variables of Burnout, POS,
Coworker Social Support, Nursing Practice Environment

Variable	Instrument	Number of Items	Cronbach's α Coefficient
Burnout	MBI – EE subscale	7	.89
POS	POS Survey	8	.99
Coworker Social Support	Health and Safety Executive Indicator Tool	4	.89

Variable	Instrument	Number of Items	Cronbach's α Coefficient
Nursing Practice Environment	PES-NWI	31	.95
Demographics	Short demographic survey	9	N/A

Notes: MBI-EE Subscale = Maslach Burnout Inventory – Emotional Exhaustion Subscale; PES=NWI = Practice Environment Scale of the Nursing Work Index.

Descriptive Analyses of Study Variables

Burnout

Descriptive statistics for the major study variables are presented in Table 7. On the Maslach Emotional Exhaustion Subscale, participants had a mean score of 19 (SD = 8.4). Twenty-one percent reported low levels of burnout (less than 18), 52% reported moderate levels of burnout (scores of 19-26), and 21% reported high levels of burnout (scores of 27 or greater). The possible scores ranged from 6 to 43, with the range in this study of 7 to 43.

POS

As shown in Table 7, the mean score of the participants was 36 (SD = 3.2), with a range of 25 to 44. Higher scores on the POS indicate participants believe their organization cares about them and is sincerely interested in their well-being.

Coworker Social Support

As shown in Table 7, the mean score of the participants in the coworker social support category was 16 (SD 3.4), with a range of 6 to 20, with 19% reporting high

scores (>16). The result indicates that the majority of HPNA palliative care nurses

believe they receive adequate coworker social support.

Practice Environment Scale of the Nursing Work Index (PES-NWI)

As presented in Table 7, the mean composite score of the PES-NWI for this study

was 2.9 (SD .56), with a range of 1.4 to 4. The individual subscale scores of the PES-

NWI were: nurse participation in hospital affairs (NPHA 2.64); nurse foundations for

quality care (NFQC 3.02); nurse manager ability, leadership and support of nurses

(NMAL 2.98); staffing and resource adequacy (SRA 2.48); and collegial nurse-physician

relations (NSMD 3.11). Scores above 2.5 indicate a favorable work environment, with

those less than 2.5 described as unfavorable (Lake, 2002). Staffing and resource

adequacy scored lowest on the PES-NWI, indicating palliative care nurses do not believe

they have the resources needed to perform their jobs.

Table 7

Descriptive Statistics for Major Study Variables (N=73)

Variable	Mean	Median	SD	Minimum	Maximum
Burnout	19	18	8.4	7	43
POS	36	34	3.2	25	44
Coworker Social Support	16	17	3.4	6	20
Nursing Practice Environment	2.9	2.9	.56	1.4	4

Subscale	Low level	Moderate level	High level
Burnout	21%	52%	21%

Note: POS = perceived organizational support.

Results Related to the Specific Aims

To address Aim 1, to examine the influence of POS, coworker social support, and the nursing practice environment on burnout in palliative care nurses, the following data analyses were used:

Pearson's correlations were computed to examine the relationships between POS, coworker social support, the nursing practice environment, and nurse demographics on burnout. There was a significant negative correlation between burnout and POS ($r = -.356$, $p = .003$). As support from the organization increases, perceived burnout decreases. There was a significant negative correlation between burnout and coworker social support ($r = -.312$, $p = .008$). As support from coworkers increase, perceived burnout decreases. There was a significant positive correlation between years of nursing experience and years of palliative nursing experience ($r = .294$, $p = .015$). (See Table 8.)

Table 8

Pearson's Correlations with Major Study Covariates

	Burnout	POS	Coworker Social Support	Nursing Practice Environment	Age	Years of Nursing Experience	Years of Palliative Experience	Education Level	Marital Status
Burnout	1	-.356 (.003)***	-.312 (.008)**	-.374 (.002)	-.104 (.408)	.131 (.274)	-.043 (.733)	.124 (.304)	-.270 (.023)*
POS		1	.375 (.001)***	.697 (.001)***	-.095 (.455)	-.147 (.221)	.104 (.404)	.081 (.504)	-.017 (.887)
Coworker Social Support			1	.525 (.001)***	-.163 (.192)	-.132 (.245)	-.183 (.135)	-.119 (.318)	-.131 (.271)
Nursing Practice Environment				1	-.013 (921)	-0.21 (.867)	-.058 (.657)	.029 (.818)	-.064 (.615)
Age					1	.754 (.001)***	.173 (.175)	-.754 (.001)***	.225 (.069)
Years of Nursing Experience						1	.294 (.015)*	.319 (.006)**	.133 (.265)
Years of Palliative Care Experience							1	.297 (.015)*	.024 (.850)
Education Level								1	-.154 (.201)
Marital Status									1

Note: POS = perceived organizational support.
*p≤.05; **p≤.01; ***p≤.001

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To address Aim 2, the researcher performed multiple regression analysis. Results of the regression analysis with the independent variables of age, gender, marital status, years of nursing experience, years of palliative experience, education level, and POS, for Model 1 were: adjusted R^2 = .369, SE = 6.80, F (8, 51). Model 2, with all of the variables entered in addition to the practice environment, were: adjusted R^2 = .432, SE = 6.68, F (9, 44). There was a slight increase in adjusted R^2 in the second model when the PES-NWI scores were entered, indicating the model was improved when the practice environment variable was added. The variables that were significantly related to emotional exhaustion in multiple regression were age, years of nursing experience, and marital status. (See Table 9 for regression coefficients and p values.)

Table 9

Summary of Multiple Regression Analyses for Variables of POS, Coworker Social Support (N = 73)

Variable	Model 1			Model 2		
	B	SE	t	B	SE	t
Intercept	61.1	14.7	4.13***	55.12	19.06	2.89**
Age	-3.98	.120	-3.30**	-.421	.119	-3.54**
Gender	.125	5.14	.024	7.03	7.72	.910
Marital Status	-4.90	1.86	-2.63*	-6.05	1.93	-3.12*
Years of Nursing	.442	.118	3.72***	.516	.121	4.25***
Years of Palliative Care	-1.11	.166	-.664	.113	.167	-.675
Education Level	-.964	1.18	-.814	-1.13	1.21	-.937
POS	-.238	.085	-2.81**	-1.21	.109	-1.11
Coworker Social Support	-.474	.297	-1.59	-1.41	.325	-.434
Nursing Practice Environment				-5.17	2.57	-2.01*
Overall Test	**Adjusted R^2**	**SE**	**F test**	**Adjusted R^2**	**SE**	**F test**
Model Summary	.369	6.80	$F_{(8, 51)}$= 5.32***	.432	6.68	$F_{(9, 44)}$= 5.47***

Note: POS = perceived organizational support.
*p<.05. **p<.01 ***p<.0001

To address Aim 3, to examine potential moderators (POS and coworker social support) on the relationship between demographic characteristics and palliative care nurse burnout, a moderation effect was tested using interaction terms. To avoid potentially problematic high multicollinearity with the interaction term, the variables were centered, and standardized z scores and interaction terms were created (Aiken & West, 1991). Four models were tested using interaction terms.

The first model tested the moderating effect of POS on the relationship between age and emotional exhaustion. The results were: adjusted $R^2 = .145$, SE = 7.90, $p = .741$. The interaction between age and POS was not statistically significant; however, the main effect of POS was highly significant ($p = .001$). In the second model, the moderating effect of coworker social support on the relationship between age and emotional exhaustion was tested. The results were: adjusted $R^2 = .095$, SE = 8.086, $p = .294$. The interaction between age and coworker social support was not statistically significant; however, the main effect of coworker social support was highly significant ($p = .005$). In the third model, the moderating effect of POS on the relationship between years of nursing experience and emotional exhaustion was tested. The results were: adjusted $R^2 = .108$, SE = 7.98, $p = .418$. The interaction between years of nursing experience and emotional exhaustion was not statistically significant; however, the main effect of POS was highly significant ($p = .005$). Finally, in the fourth model, the moderating effect of coworker social support on the relationship between years of nursing experience and emotional exhaustion was tested. The results were: adjusted $R^2 = .066$, SE = 8.12, and $p = .885$. There was no statistical significance for the interaction effect; however, the main effect of coworker social support was significant ($p = .014$).

The models were then tested without the interaction terms to determine whether the R^2s changed. For POS and age, adjusted R^2 changed from .145 to .157. (See Table 10). In the second model, testing age and coworker social support, adjusted R^2 decreased slightly from .095 to .093. Age was significant in this model (p = .007). (See Table 11.) In the third model, which tested years of nursing experience and POS, adjusted R^2 increased slightly, from .108 to .112. (See Table 12.) In the fourth model, which tested years of experience and coworker social support, the adjusted R^2 increased slightly from .066 to .079. (See Table 13.) In each model according to the adjusted R^2 change, the interaction term had a small effect size and did not result in improving the models. POS and coworker social support were not moderators of the relationships of age and years of nursing experience on emotional exhaustion. However, POS and coworker social support were strong predictors of burnout.

Table 10

Moderating Effect of POS on the Relationship between Age and Burnout

1	Model	B	SE	Beta	t	p
	Constant	35.505	5.847		6.072	.000
	Age	-.905	.088	-.128	-1.081	.284
	POS	-.295	.085	-.415	-3.459	.001
	Age X POS	-.386	1.160	-.040	-.332	.741
		Adj. R²	**SE**			
	Model Summary	.145	7.906			

2	Model	B	SE	Beta	t	p
	Constant	35.821	5.72		6.25	.001
	Age	-.096	.087	-.130	-1.11	.271
	POS	-.300	.083	-.422	-3.60	.001
		Adj. R²	**SE**			
	Model Summary	.157	7.84			

Table 11

Moderating Effect of Coworker Social Support on the Relationship between Age and Burnout

1	Model	B	SE	Beta	t	p
	Constant	41.039	7.469		5.495	.000
	Age	-.125	.090	-.168	-1.386	.171
	CSS	-.910	.311	-.357	-2.932	.005
	Age X CSS	1.259	1.189	.128	1.059	.294
		Adj. R^2	**SE**			
	Model Summary	.095	8.086			

2	Model	B	SE	Beta	t	p
	Constant	39.538	7.34		5.38	.001
	Age	-.115	.090	-.155	-1.29	.007
	CSS	-.858	.307	-.337	-2.79	.202
		Adj. R^2	**SE**			
	Model Summary	.093	8.09			

Note: CSS = coworker social support.

Table 12

Moderating Effect of POS on the Relationship between Years of Nursing Experience and Burnout

1	Model	B	SE	Beta	t	p
	Constant	26.11	3.610		7.233	.000
	Yrs	.070	.076	.106	.921	.361
	POS	-.226	.077	-.338	-2.938	.005
	Yrs X POS	-.813	.998	-.093	-.814	.418
		Adj. R^2	**SE**			
	Model Summary	.108	7.987			

2	Model	B	SE	Beta	t	p
	Constant	26.2	3.59		7.29	.001
	Yrs	.072	.076	.109	.948	.347
	POS	-.227	.077	-.339	-2.96	.004
		Adj. R^2	**SE**			
	Model Summary	.112	7.96			

Note: Yrs = years of nursing experience.

Table 13

Moderating Effect of Coworker Social Support on the Relationship between Years of Nursing Experience and Burnout

1	Model	B	SE	Beta	t	p
	Constant	29.869	5.369		5.564	.000
	Yrs	.062	.077	.094	.799	.427
	CSS	-.737	.290	-.297	-2.536	.014
	Yrs X CSS	-.153	1.056	-.017	-.145	.885
		Adj. R^2	**SE**			
	Model Summary	.066	8.125			

2	Model	B	SE	Beta	t	p
	Constant	30.046	5.19		5.78	.001
	Yrs	.059	.075	.091	.791	.431
	CSS	-.743	.285	-.300	-2.60	.011
		Adj. R^2	**SE**			
	Model Summary	.079	8.06			

Notes: CSS = coworker social support; Yrs = years of nursing experience.

Summary

In summary, a total of 102 participants were enrolled in this study. Twenty-nine surveys were incomplete and, therefore, not usable, resulting in a sample of 73. The nurses in the study had a mean age of 52, 48% had a bachelor's degree in nursing, 20% had associate degrees in nursing. The nurses had from one to 33 years of palliative care nursing experience, with a mean of 8 years. Ninety-seven percent were female and 3% male. Gender was dropped from data analysis due to the small number of males in the sample. There was a significant negative correlation between emotional exhaustion and coworker social support (r = -.312, p = .008). As support from coworkers increases, burnout decreases. There was a significant positive correlation between years of nursing

experience and years of palliative nursing experience (r = .294, p = .015), but not

education level or gender.

POS and coworker social support were not found to be moderators for

demographics of age or years of experience and their relationship to burnout.

CHAPTER 5

DISCUSSION, LIMITATIONS, CONCLUSIONS, IMPLICATIONS,
AND RECOMMENDATIONS

The purpose of the study was to examine the influence of perceived organizational support (POS), coworker social support, the nursing practice environment, and nurse demographics (age, years of nursing experience, education level, marital status, and gender) on burnout in a national sample of palliative care nurses. This chapter presents the discussion, conclusions, implications, and recommendations based on the results of the study.

Discussion

Seventy-three percent of palliative care nurses in this study reported moderate to high burnout levels. Findings from this cross-sectional descriptive study indicated that as POS increases, burnout decreases. The findings are consistent with the literature. POS has been found to reduce workplace stressors (Eisenberger et al., 1986; Kim et al., 2016; Rhoades & Eisenberger, 2002), and, therefore, could reduce burnout.

The studies from the literature search are conflicting as to whether coworker social support is instrumental in decreasing or preventing burnout (AbuAlRub et al., 2004; Amarneh et al., 2009). This study confirmed that coworker social support is an important variable. There was a significant negative correlation between burnout and coworker social support, indicating that as support from coworkers increases, burnout decreases. In addition, in multiple regression models, coworker social support was related to decreased burnout.

Palliative care nurses reported a composite score on the Practice Environment Scale of the Nursing Work Index (PES-NWI) of 2.84, indicating that their work environments are favorable or positive. Favorable nurse practice environments in palliative care nursing may be due to the interdisciplinary team approach to patient care. Such care allows for physical, spiritual, and emotional needs for patients, families, and the nurses providing the care (Daem et al., 2019; Strand et al., 2014).

Palliative care nurses work in a variety of settings, including palliative care units, outpatient settings, patients' homes, residential hospice clinics, long-term and skilled care facilities, and acute inpatient facilities (Parola et al., 2017; Schroeder & Lorenz, 2017). Evidence indicates that working in intensive care units and other high-stress areas, such as the emergency room, pediatrics, medical surgical units, and oncology, is associated with high burnout levels (Aiken et al., 2002). Using the Maslach Burnout Inventory (MBI) Emotional Exhaustion Subscale, nurses in these areas scored higher than the palliative care nurses in the current study.

Previous studies revealed that POS decreases workplace stressors (Eisenberger et al., 1986; Kim et al., 2016; Rhoades & Eisenberger, 2002), and, therefore, may decrease burnout. Positive conditions at work, support from managers, rewards, and fairness may lead to increased self-esteem and low levels of burnout (Kurtessis et al., 2017; Yaghoubi et al., 2014).

Research on palliative care staff and coworker social support suggests support of the team is one of the basic coping strategies for this population (Strand et al., 2014). Studies confirm that nurses who work in supportive environments where teamwork is a factor have lower levels of burnout and are satisfied with their jobs (Aiken et al., 2001;

Needleman et al., 2011). Higher levels of teamwork among nurses at the unit level have

been associated with lower burnout levels (Kanai-Pak et al., 2008; Rafferty et al., 2001;

Van Bogaert et al., 2014).

The demographics provided many considerations for the study. Study

participants, who were bedside caregivers, were very experienced. The mean age of the

participants was 52. Forty-eight percent had a bachelor's degree in nursing. Fifty

percent of the nurses had 33 years of experience in palliative care nursing. In the

Pearson's correlations, there were no significant correlations among age and burnout

($r = -.104$, $p = .408$); years of nursing experience and burnout ($r = .131$, $p = .274$);

education level and burnout ($r = .124$, $p = .304$); gender and burnout ($r = -.011$, $p = .93$);

POS and burnout ($r = -.312$, $p = .008$); or practice environment and burnout ($r = -.104$,

$p = .408$). However, there was a significant negative correlation between coworker social

support and burnout ($r = -.374$, $p = .002$), as well as a significant correlation between

marital status and burnout ($r = -.270$, $p = .023$). The literature from numerous studies

regarding the effect of age and years of experience on employee burnout is inconsistent

(Ang et al., 2016; Brewer & Shapard, 2004). Sacco et al. (2015) found that nurses 40 to

49 years old had a greater occurrence of burnout than younger groups, while Berger et al.

(2015) found nurses (18 to 39 years old) had higher levels of burnout compared to those

over age 40.

The proposed conceptual model for the study (Figure 1) suggested a positive

relationship between POS and coworker social support. The model predicted POS and

coworker social support as potential moderators of the relationship between demographic

characteristics and palliative nurse burnout. POS and coworker social support were not

found to be moderators of the relationship of age and years of nursing experience on burnout. This could be due to the small sample size. With a replication study with a larger sample size, moderator variables may be essential in explaining these relationships. The practice environment, when added to all models, was a significant predictor of burnout. This confirms findings from the literature review that the practice environment has a direct association to the prevention of burnout (Aiken et al., 2002). Because of the small sample size, this study is considered to be a pilot project.

Limitations

As with any research study, this one is not without its limitations. Most of the participants were female (97%), and 3% were male, which could also affect the results. Male nurses, who make up about 8 to 10% of the national nursing population, were underrepresented in this study. The use of an online survey to collect data is a potential limitation. Surveys generally yield response rates of 25% or less (Dillman, 2011). It was not possible to calculate a precise response rate for the survey because of how the survey link was sent to the Hospice and Palliative Nurses (HPNA) membership. Furthermore, it is hard to determine if the sample represents the palliative care population.

Another limitation was the small sample size, which likely affected the findings. For testing of moderation analysis, a large sample size needs to be established a priori (Baron & Kenny, 1986). There were many factors that may have contributed to the small sample size. For example, the use of an online survey and the time of data collection, from November to April, may have affected participation. This study was not funded; therefore, incentives were not offered to the participants.

There are other demographic characteristics that may have been useful in this study, such as race, regional location of the nurses, and type and size of the hospital where they were employed. Although this study had its limitations, it added meaningfully to the body of knowledge by identifying associations among the major variables of burnout, POS, coworker social support, the nursing practice environment, and demographics on burnout in palliative care nurses.

Conclusions

The major purpose of this study was to examine the influence of POS, coworker social support, the nursing practice environment, and nurse demographics (age, years of nursing experience, education level, marital status, and gender) on burnout in a national sample of palliative care nurses. The results of the study examined the associations between the major variables of POS, thus providing a global representation of burnout in palliative care nurses.

Palliative care nurses reported moderate to high levels of burnout. Drawing attention to some of the possible challenges in palliative care nursing, such as burnout, and making it a priority, may help to prevent future burnout and continue to aid recruitment and nurse retention in this highly skilled specialty area. The conclusions from the study point to the need for a replication study with a larger sample size. Then the results could inform policy and practice through the continued development of interventions, courses, and additional training directed toward maintaining healthy work environments.

Institutions and organizations should continue to focus on forming healthy work environments in which nurses feel supported by their coworkers, supervisors, and physicians. Organizations should make available stress management workshops and other educational programs that target nurses' psychosocial well-being and interactive skills. Medland, Howard-Ruben, and Whitaker (2004) defined ways to nurture psychosocial wellness in oncology staff by addressing burnout and social support in the workplace and conducting five full-day retreats with oncology staff members. Staff members reported that because of the retreats, they experienced less stress; therefore, they reported less burnout. Lambert and Steward (2007) reported on a staff retreat that identified goals of teamwork and clarifying roles to improve work effectiveness. Staff members that participated reported their leadership skills and teamwork improved, and their job satisfactions scores increased by 25%. The use of journaling as psychosocial wellness tool was conducted by Adams and Putrino (2010). The authors reported positive responses from group participants who were involved with the expressive writing portion of the workshop (Adams & Putrino, 2010).

The shortage of registered nurses is also a concern in hospice and palliative care. The data on the complexity of the shortage is very limited, but the magnitude of the problem has been acknowledged by such organizations as the HPNA (Lindley, Cozad, & Mixer, 2015). Transformational leadership classes and training programs should be offered to nurse managers. Leadership is a favorable area for intervention and one that can improve the lives of staff and supervisors, and ultimately patient care (Green et al., 2013). Leaders can be trained to make positive changes in the work environment that promote nurses' health and retention (Green et al., 2013).

Encouraging a workplace culture that respects nurses' days off, promotes nurses' prompt departure at the end of a scheduled shift, and allows nurses to refuse mandatory overtime without repercussions is essential. Policies need to be implemented by nursing administrations within hospitals to monitor the number of hours nurses work, including hours worked on a second job (Stimpfel et al., 2012). Organizational interventions, such as decreasing long working hours, implementing rotational working between units, incorporating team-building exercises, teaching nurses relaxation techniques, training nurses in stress management, having regular meetings with colleagues, and improving social environments, are necessary to decrease nurses' burnout (İlhan, Durukan, Taner, Maral, & Bumin, 2008). At the state level, boards of nursing should consider whether placing restrictions on nurse shift length and voluntary overtime is wise (Stimpfel et al., 2012).

Implications for Future Research

Based on the limitations identified in this study, several recommendations can be made for further research. Repeating analysis of the study with a larger sample size may generate a more robust study. With a replication study using a larger sample size, moderator variables may be essential in explaining the relationships between POS, coworker social support, age, years of nursing experience, and palliative care nurse burnout.

A qualitative component to the study may help to identify what strategies palliative care nurse managers and nurses utilize to help decrease or prevent burnout. We note this study only used the Emotional Exhaustion Subscale of the MBI; future studies

may benefit from examining depersonalization and personal accomplishment. Prospective studies may look at additional demographic characteristics such as race, regional location of palliative care nurses, and type of practice and size of the hospital where they are employed.

The sample of HPNA nurses reported moderate to high burnout levels. The role of the team in palliative care is worth exploring further. Team meetings may be a worthwhile intervention to mitigate burnout. Team meetings may serve as safe environments for expression, concerns, doubts, and fears (Parola et al., 2018). Other burnout interventions might include: ensuring that staff attend End of Life Nursing Education Consortium (ELNEC) training courses; teaming less-experienced nurses with more-experienced nurses; enlisting support from supervisors to address concerns; soliciting assistance from hospice chaplains or counselors; and continuing education training to help nurses develop coping skills. Other interventions may include mindfulness, meditation, and coping programs. Future research should pay attention to the interventions that are being utilized to prevent burnout development in palliative care nurses. It would be important to investigate these strategies in future studies, because they could possibly be applied to professionals experiencing burnout in other specialty areas.

Nurse managers and administrators may be encouraged to work toward the development of systems of care delivery that support nurses' ability to experience and cope with their emotions. Developing coping mechanisms may help to improve the quality of patient care, and at the same time reduce the incidence of burnout. Finally,

those who are vulnerable, such as those with little experience, should be monitored closely for signs of burnout.

In 2013, the researcher conducted a qualitative study in a small palliative care unit. During interviews, palliative care nurses reported they did not receive the support needed from their manager or institution to help them cope with the high volumes of deaths experienced in their units. Nurses need outlets for the problems and issues they face as they take care of patients and families.

As a result of the findings from this study, it is anticipated that a manuscript will be submitted for publication in the Journal of Hospice and Palliative Nursing. An abstract will be submitted for podium presentation at the HPNA annual assembly 2020 in San Diego, California, and the National Black Nurses Association's conference in 2020 in Hollywood, Florida.

In addition, focus groups through an online chat room may be established to provide palliative care bedside staff nurses a safe forum to express their feelings on a regular basis and to continue to add to the current POS and coworker social support that they receive.

<div align="center">Summary</div>

In conclusion, burnout is a significant problem in palliative care nurses. Seventy-three percent of palliative care nurses in this study reported moderate to high levels of burnout. It is important to address burnout early to prevent severe consequences. Identifying factors associated with burnout in palliative care nurses may help managers to

monitor for those at risk. Nurse participants were experienced, with a mean of 29 years of nursing experience, and 8 years of palliative care nursing experience.

POS and coworker social support were not found to be moderators in this study. Moderator variables play an important role in explaining why a relationship exists, or the strength or direction of the relationship. The small sample size of this study may have affected the results. With a replication of the study and a larger sample size, moderator variables may play important roles in explaining these relationships.

Age and years of nursing experience were significantly associated with burnout in multiple regression analysis. The nursing practice environment, when added to the regression model, was statistically significant. The future of clinical practice and sustainability of palliative care nurses is crucial for patients, families, and organizations. Strategies to prevent and reduce burnout must continue to be examined, and results shared through publications, presentations, blogs, chat rooms, or other forums in which nurses participate. The information may inform policy and practice through the development of interventions that create better practice environments that support the palliative care nurse.

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APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL

APPROVAL LETTER

TO: Lowe, Marcia Ann

FROM: University of Alabama at Birmingham Institutional Review Board
Federalwide Assurance # FWA00005960
IORG Registration # IRB00000196 (IRB 01)
IORG Registration # IRB00000726 (IRB 02)

DATE: 07-Dec-2017

RE: IRB-300001032
An Exploratory Study of the Influence of Perceived Organizational Support, Co-worker Social Support, the Nursing Practice Environment, and Nurse Demographics on Emotional Exhaustion (EE) in Palliative Care Nurses

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The IRB reviewed and approved the Initial Application submitted on 30-Nov-2017 for the above referenced project. The review was conducted in accordance with UAB's Assurance of Compliance approved by the Department of Health and Human Services.

Type of Review: Expedited (Category 7)
Determination: Approved
Approval Date: 07-Dec-2017
Approval Period: One Year
Expiration Date: 06-Dec-2018

The following apply to this project related to informed consent and/or assent:

- Waiver of Consent Documentation

Documents Included in Review:

- datacollection.demographics.171129
- waiverdocumentation.171129
- hsp.clean.171130
- tableofvariables.171129
- surveyquest.pesnwi.171129
- invitationtoparticipate.171129
- surveyquest.HSE.171129

THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

Office of the Institutional Review Board for Human Use

470 Administration Building
701 20th Street South
Birmingham, AL 35294-0104
205.934.3789 | Fax 205.934.1301 |
irb@uab.edu

APPROVAL LETTER

TO: Lowe, Marcia Ann

FROM: University of Alabama at Birmingham Institutional Review Board
         Federalwide Assurance # FWA00005960
         IORG Registration # IRB00000196 (IRB 01)
         IORG Registration # IRB00000726 (IRB 02)

DATE: 16-Nov-2018

RE: IRB-300001032
      An Exploratory Study of the Influence of Perceived Organizational Support, Co-worker
      Social Support, the Nursing Practice Environment, and Nurse Demographics on
      Emotional Exhaustion (EE) in Palliative Care Nurses

The IRB reviewed and approved the Continuing Review submitted on 15-Nov-2018 for the above referenced project. The review was conducted in accordance with UAB's Assurance of Compliance approved by the Department of Health and Human Services.

Type of Review: Expedited
Expedited Categories: 7
Determination: Approved
Approval Date: 16-Nov-2018
Approval Period: One Year
Expiration Date: 15-Nov-2019

The following apply to this project related to informed consent and/or assent:

- Waiver of Consent Documentation

Documents Included in Review:

- Informationsheet.clean.171207
- IPR

APPENDIX B

INVITATION TO PARTICIPATE

Dear Nurse Colleague:

My name is Marcia Lowe. I am a PhD student in Nursing at the University of Alabama at Birmingham, in Birmingham, Alabama. I am completing my dissertation research. I am writing to invite you to complete an online survey for a research study entitled, " An exploratory study of the influence of Perceived Organizational Support, So-Worker Social support, the Nursing Practice Environment, and Nurses Demographics on Emotional Exhaustion (EE) in Palliative Care Nurses". This survey will examine the influence of perceived organizational support, coworker social support, the nursing practice environment, and nurse demographics on emotional exhaustion (EE) in palliative care nurses. The knowledge gained from the survey may lead to improvements in the palliative care work environment.

You are receiving this invitation because you are an active registered nurse member of the Hospice and Palliative Nursing Association (HPNA), working in an inpatient setting, and providing direct patient care. If you choose to participate in the research, please type in the link provided by Qualtrics software listed below and follow the instructions.

Completing and returning the questionnaire constitutes your consent to participate. There are no forms to return and the survey will take approximately 30 minutes to complete. Thank you for your contribution.

Sincerely,

Marcia Lowe

Marcia Lowe, MSN, RN-BC, PhD (student)
University of Alabama
School of Nursing
Birmingham, Alabama 35294
malowe@uab.edu

APPENDIX C

RECRUITMENT ADS

Invitation to participate

Dear nurse colleague:

My name is Marcia Lowe and I am a PhD student in Nursing at the University of Alabama at Birmingham (UAB). I am inviting registered nurses who provide direct patient care to patients in an inpatient palliative care [non-hospice] clinical settings to complete an online survey for my doctoral dissertation study entitled, "An Exploratory Study of the influence of Perceived Organizational Support, Coworker Social Support, the Nursing Practice Environment, and Nurse Demographics on Emotional Exhaustion (EE) in Palliative Care Nurses." The knowledge gained from the study may lead to improvements in the palliative care work environment. If you choose to participate, please type the Qualtrics link into your browser and follow the instructions.

This study is approved by the UAB IRB and the HPNA Board of Directors.

Completing and returning the survey constitutes your consent to participate. There are no forms to return. It will take you approximately up to 30 minutes to complete.

Access the online survey:
https://uab.co1.qualtrics.com/jfe/form/SV_41ScwDkvQrhe17L

You may contact me at malowe@uab.edu and I will provide the electronic link to the survey.

Research Participants Needed

An Exploratory Study of the Influence of Organizational Support, Coworker Social Support, the Nursing Practice Environment, and Nurse Demographics on Emotional Exhaution (EE) in Palliative Care Nurses

My name is Marcia Lowe. I am a PhD student in Nursing at the University of Alabama at Brimingham, in Birmingham, Alabama. I am completing my dissertation research. I am inviting you to complete an online survey. The purpose of the proposed study is to examine the influence of perceived organizational support, coworker social support, the nursing practice environment, and nurse demographics (age, gender, years of nursing experience, educational level) on emotional exhaustion in a national sample of palliative care nurses. Participation in this study will require up to 30 minutes and will be completed online. Attached is the link to Qualtrics for completion of the survey. The knowledge gained from the survey may lead to improvements in the work environment.

Call or email for more information!
Marcia Lowe
205-542-1677
malowe@uab.edu

APPENDIX D

INFORMATION SHEET

An Exploratory Study of the Influence of Perceived Organizational Support, Coworker Social Support, the Nursing Practice Environment, and Nurse Demographics on Emotional Exhaustion (EE) in Palliative Care Nurses.

You are invited to take part in a research survey that is being conducted as part of my dissertation research for the doctoral program in nursing at UAB. This research is being conducted to further knowledge of the influence of perceived organizational support, coworker social support, the nursing practice environment, and nurse demographics on emotional exhaustion (EE) in palliative care nurses. If you agree to participate, you will be asked to complete a confidential survey. The completion time is up to 30 minutes.

There are no know physical risks for this study, however answering questions in relation to burnout could lead to minor emotional stress. If you experience emotional stress due to study participation and would like to speak with a mental health professional, you can contact Dr. Kathryn Knowlton at (205) 531-6207 or Dr. Sylvia Huang at (205)975-0645 for consultation and referral information regarding counseling support. Dr. Knowlton is a counselor and Dr. Huang is a psychologist with Palliative Care Counseling Services at the University of Alabama at Birmingham.

You will not benefit by being in this research; however, your participation will contribute to the current literature on the subject of the influence of perceived organizational support, coworker social support, the nursing practice environment, and nurse demographics on emotional exhaustion (EE) in palliative care nurses. No compensation will be offered for your participation and it costs you nothing to be in the study.

The data in this study will be confidential. Reasonable efforts have been made to protect the confidentiality of your transmission, and your identity will not be linked your responses to the survey. The results from the Qualtrics survey software will only be viewed by Marcia Lowe (researcher) and dissertation committee members. Your name will not be included in the surveys. The Qualtrics account is password protected.

Your participation is strictly voluntary. You may withdraw from the study at any time. There is no penalty to withdraw and withdrawal does not affect your good standing with your employer, or with the Hospice and Palliative Nurses Association.

This research is being conducted by Principal Investigator Marcia Lowe, MSN, RN-BC for completion of doctoral dissertation research, with faculty advisement from Patricia Patrician, PhD, FAAN. If you have questions, concerns, or complaints about the research, please contact the Principal Investigator at (205)-542-1677 or at malowe@uab.edu.

If you have questions about your rights as a research participant, or concerns or complaints about the research, you may contact the UAB office of the IRB (OIRB) at (205) 934-3789 or toll free at 1-855-860-3789. Regular hours are 8:00 a.m. to 5:00 p.m. CT, Monday through Friday.

By completing the online survey, I agree I have read this form and will participate. Thank you for your consideration.

APPENDIX E

DEMOGRAPHIC SURVEY

Demographic Survey

Q1. Are you a staff nurse in an inpatient palliative care clinical setting, providing direct patient care? If no, please exit and do not complete the survey. If yes, please continue on to complete the survey. Please write in your age, years of nursing experience, and years of palliative care nursing experience. Place an X by the appropriate box of the other questions.

Q2. Age____
Q3. Gender_____
Q4. Marital Status: Single_____Married_____Divorced____Widowed____
Q5. Years of Nursing Experience_____
Q6. Years of Palliative Care Nursing Experience_____
Q7. Highest level of nursing education: Diploma___Associate Degree___
    BSN___MSN___Master's degree (not in nursing)___DNP___DSN/DNS/PhD___
Q8. Are you a certified palliative or hospice nurse?
Q9. Do have a current prescription for any of the following medication? Check all that
      apply.
A. Antidepressants (such as SSRIs)
B. Anti-anxiety (such as Benzos)
C. Blood pressure
D. Over the counter pain medications (such as Tylenol, Motrin, Aspirin,
E. Prescription pain medications (such as narcotics/opiods)
F. ADHD
G. Sleep
H. Birth Control
I. Proton Pump inhibitors (such as Zantac)
J. Prefer not to answer

APPENDIX F

MASLACH BURNOUT INVENTORY: EMOTIONAL EXHAUSTION SUBSCALE

Questions	Never	A few times a year	Once a month	A few times per month	Once a week	A few times per week	Every day
Section A	0	1	2	3	4	5	6
I feel emotionally drained by my work.							
Working with people all day long requires a great deal of effort.							
I feel like my work is breaking me down.							
I feel frustrated by my work.							
I feel I work too hard at my job.							
It stressed me too much to work in direct contact with people.							
I feel like I'm at the end of my rope.							
Total score							

APPENDIX G

PERCEIVED ORGANIZATIONAL SUPPORT SURVEY

Perceived Organizational Support Survey (8 item):

Listed below are statements that represent possible opinions that YOU may have about your place of work. Please indicated the degree of your agreement or disagreement with each statement by filling in the circle on your answer sheet that bets represents your point of view. Please choose from the following answers:

0	1	2	3	4	5	6
Strongly Disagree	**Moderately Disagree**	**Slightly Disagree**	**Neither Agree nor Disagree**	**Slightly Agree**	**Moderately Agree**	**Strongly Agree**

1. The organization values my contribution to its well-being.

2. The organization fails to appreciate any extra effort from me.

3. The organization would ignore any complaint from me.

4. The organization really cares about my well-being.

5. Even if I did the best job possible, the organization would fail to notice.

6. The organization cares about my general satisfaction at work.

7. The organization shows very little concern for me.

8. The organization takes pride in my accomplishments at work.

The questions above represent questions 1, 3, 7, 9, 17, 21, 23, and 27 of the Perceived

Organizational Support Survey (8 items)

APPENDIX H

COWORKER SOCIAL SUPPORT SCALE

HSE Management Standards Peer Support subscale:

1. If works gets difficult, my colleagues will help me   Never 1   Seldom 2

    Sometimes 3   Often 4   Always

2. I get help and support I need from colleagues   Never 1   Seldom 2

    Sometimes 3   Often 4   Always

3. I receive the respect at work I deserve from colleagues   Never 1   Seldom 2

Sometimes 3   Often 4   Always

4. My colleagues are willing to listen to my work-related problems   Never 1

    Seldom 2   Sometimes 3   Often 4   Always

The questions above represent questions 7, 24. 27, and 31 of the HSE Management

Standards Peer Support subscale.

APPENDIX I

PRACTICE ENVIRONMENT SCALE OF THE NURSING WORK INDEX (PES-NWI)

The Practice Environment Scale of the Nursing Work Index (PES-NWI) (Items listed by subscale)

Your participation is completely voluntary. Your identity is not linked to any responses. For each item, please indicate the extent to which you agree that the item is present in your current job position.

Nurse Participation in Hospital Affairs

Questions	Strongly Agree	Agree	Disagree	Strongly Disagree
1.Staff nurses are involved in the internal governance of the hospital.	4	3	2	1
2. Opportunity for staff Nurses to participate in policy decisions.	4	3	2	1
3. Many opportunities for advancement of nursing personnel.	4	3	2	1
4. An administration who listens to and responds to employee concerns.	4	3	2	1
5. A director of nursing highly visible and accessible to staff	4	3	2	1
6. Career development/clinical ladder opportunity.	4	3	2	1
7. Nursing administrators consult with staff on daily problems and procedures.	4	3	2	1
8. Staff nurses have the opportunity to serve on hospital and nursing department committees.	4	3	2	1

9. A chief nursing executive equal in power and authority to other top level hospital executives.	4	3	2	1

Nursing Foundations for Quality Care

10. Use of nursing diagnoses.	4	3	2	1
11. An active quality assurance program.	4	3	2	1
12. A preceptor program for newly hired RNs.	4	3	2	1
13. Nursing care is based on a nursing rather than a medical model.	4	3	2	1
15. A clear philosophy of nursing that pervades the patient care environment.	4	3	2	1
16. Written, up-to-date nursing care plans for all patients.	4	3	2	1
17. High standards of nursing care are expected by the administration.	4	3	2	1
18. Active in-service/continuing education programs for nurses	4	3	2	1
19. Working with nurses who are clinically competent.	4	3	2	1

Nurse Manager Ability, Leadership, and Support of Nurses

20. A lead nurse who is a good manager and leader.	4	3	2	1
21. A head nurse/supervisor who backs up the nursing staff in decision making, even if the conflict is with a physician.	4	3	2	1
22. Supervisors use mistakes as learning opportunities, not criticism.	4	3	2	1
23. A supervisory staff that is supportive of nurses.	4	3	2	1
24. Praise and recognition for a job well done.	4	3	2	1

Staffing and Resource Adequacy

25. Enough staff to get the work done.	4	3	2	1
26. Enough registered nurses to provide quality patient care.	4	3	2	1
27. Adequate support services allow me to spend time with my patients.	4	3	2	1
28. Enough time and opportunity to discuss patient care problems with other nurses.	4	3	2	1

Collegial Nurse-Physician Relations

29. A lot teamwork between nurses and doctors.	4	3	2	1
30. Physicians and nurses have good relationships.	4	3	2	1
31. Functional collaboration (Joint practice) between nurses and physicians.	4	3	2	1

APPENDIX J

TABLE OF VARIABLES

Table of Variables

Concept	Instrument	Number of Items	Cronbach's Alpha
Burnout (Emotional Exhaustion Subscale)	MBI – EE subscale	7	.71-.80
POS	POS Survey	8	.89
Coworker Social Support	Health and Safety Executive Indicator Tool	4	.82
The Nursing Practice Environment	PES-NWI	31	.71-.84
Demographic Survey	Short demographic survey	9	N/A

APPENDIX K

LETTERS OF SUPPORT

Marianne Matzo <MarianneM@hpna.org>
Reply|
Lowe, Marcia Ann
HI Marcia….this looks as though you have addressed all of the reviewers
concerns. Please send me your cover letter with the link to your survey and I will
distribute it within our organization. Congratulations. M

Marianne Matzo, PhD, APRN-CNP, AOCNP, ACHPN, FPCN, FAAN
Hospice and Palliative Nurses Association
Director of Research
mariannem@hpna.org
412-282-8213

Marianne Matzo <MarianneM@hpna.org>

Reply|
Thu 3/21, 9:59 AM
Lowe, Marcia Ann
Inbox
You forwarded this message on 3/21/2019 10:15 AM

RE: sample
45 KB

1 attachments (45 KB) Download
Save to OneDrive - UAB - The University of Alabama at Birmingham
HI Marcia, Since the 2015 email when you inquired about the process to access members,
the process for research reviews changed and requests no longer goes to the board. I am
attaching the mail where I relayed that you were approved to send your request to the
membership. We do not send out formal letters. Take care. M

Marianne Matzo, PhD, APRN-CNP, AOCNP, ACHPN, FPCN, FAAN
Hospice and Palliative Nurses Association
Director of Research
mariannem@hpna.org
412-282-8213

UAB CENTER FOR PALLIATIVE
AND SUPPORTIVE CARE

October 9, 2017

Patricia Patrician, PhD, FAAN
UAB School of Nursing

Dear Dr. Patrician and Members of the Dissertation Committee:

This letter is to convey my enthusiastic support to Ms. Marcia Lowe's dissertation project, "The Influence of Organizational Support, Social Support from Coworkers, and Nurse Demographics (age, gender, years of nursing experience, and education) on Burnout in Palliative Care Nurses."

I am delighted to learn that Ms. Lowe's research study will examine burnout and support experienced by nursing staff in palliative care. As you know, palliative care providers are at higher odds in experiencing burnout and compassion fatigue compared to other health care subspecialties as the nature of caring for seriously- and terminally-ill patients and families often expose professional caregivers to vicarious trauma and loss.

As licensed clinical psychologist serving patients, families, and staff at UAB Center for Palliative Care, I am committed to support Ms. Lowe and her research through the provision of consultation and referral information to counseling support to research participants should they experience emotional distress due to study participation.

I am confident that Ms. Lowe's work will be a game-changer for palliative care nurses across the nation and will further engage and educate the palliative care community toward the benefits of optimizing organizational and social support to decrease burnout experienced by nurses in palliative care settings. Please feel free to contact me should you have any questions.

Sincerely,

Chao-Hui Sylvia Huang

Chao-Hui Sylvia Huang, PhD, MA, MEd
Assistant Professor and Licensed Clinical Psychologist
UAB Center for Palliative and Supportive Care
The University of Alabama at Birmingham
CH-19, Ste. 219
933 19th Street, Birmingham, AL 35209
(o) 205.975.0645 (f) 205.975.8173
chhuang@uabmc.edu