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A Comparative Analysis of Job Satisfaction, Burnout, and Intent to Leave Among Nurses

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Randall L. McElreath

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Walden University
2020

Abstract

A Comparative Analysis of Job Satisfaction, Burnout, and Intent to Leave Among Nurses

by

Randall L. McElreath

MSN, Walden University, 2014

BSN, University of Nevada, Reno, 2008

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Nursing

Walden University

February 2020

Abstract

There is a significant shortage of qualified registered nurses in the United States which, in part, is due to a lack of job satisfaction and burnout with an intent to leave nursing, especially among nurses who work in specialty areas such as intensive care. There is limited research as to how job satisfaction and burnout contribute to intent to leave among the specialty areas of nursing working at the bedside in an acute care environment. The purpose, guided by the modeling and role modeling theory, was to determine the relationship that exists between burnout, job satisfaction, and intent to leave in nurses who work in the critical care unit within an acute care hospital in the Western United States. and to compare these results to nurses not working within the critical care environments of the same acute care hospital. Data were collected from 131 participants who completed three research tools (Job Satisfaction Survey, Copenhagen Burnout Inventory, and Anticipated Turnover Scale). Data were analyzed using multiple regression analysis. The results of the research indicated that nurses, regardless of unit, experienced significantly high levels of burnout out, which contributes to an intent to leave nursing. There was a relationship among job satisfaction, burnout, and intent to leave among nurses working in the critical care environment. However, there was no difference in job satisfaction, burnout, and intent to leave between nurses who work in critical care and nurses who do not work in critical care. Recommendations for future research should focus on what factors contribute to nurses leaving the bedside, which will ultimately allow nurses to continue to focus on patient care and contribute to positive social change for this population and the patient population.

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Dedication

I would like to dedicate this dissertation to my family. To my wife, Stephanie, I would like you to know that there is no way I could have accomplished this without your continued love and support. To each of my children, I want to apologize for not spending more time with you, but I hope to be able to do much more of that now. Finally, I wish to dedicate this to all of the nurses in this world, those who care for patients, as well as those who care for students, who will one day care for patients. Your desire and passion to heal should be celebrated and should never be diminished or taken away.

Acknowledgments

I want to thank the entire faculty from Walden University who have been instrumental in the creation of this work. Thank you to Dr. Garner for your time and wisdom, and for agreeing to be my research committee member. Thank you to those at the writing center at Walden University, for the librarians at the amazing Walden library, and for those that I will never meet that have provided valuable input into this document. I would especially like to thank my research chair Dr. Hussey for taking so much time and giving me the tools to become a better writer and researcher. Thank you to Krystal, my boss and my friend, who decided that it would be in my best interest to obtain my Master's Degree and then push me over the abyss into more education. Finally, I would again like to recognize and thank my family for all of the sacrifices that you made for me to attain this education.

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Chapter 1: Introduction to the Study

There is a significant shortage of qualified registered nurses in the United States. According to the American Association of Colleges of Nursing (2014), this nursing shortage will continue to exist and will intensify in the next 14 years. There are several reasons for this shortage, which includes the aging population of existing nurses who are nearing retirement (Sorrell, 2010) and a shortage of nursing faculty (Nardi & Gyurko, 2013). Other factors that contribute to the nursing shortage are low job satisfaction and burnout (Khamisa, Peltzer, Ilic & Oldenburg, 2016). Many conditions in nursing may contribute to low job satisfaction, burnout and intent to leave. Macken and Hyrkas (2014) reported that registered nurses who worked 12-hour shifts acknowledged moderate to high levels of stress. Poor communication and lack of support from leadership also contributed to burnout and low job satisfaction (Macken & Hyrkas, 2014).

Healthcare is a career choice in which nursing will always have a role to fulfill. Even though there is a lack of skilled and qualified nursing care (Li et al.,2013), infirmity and disease still exist and people will continue to rely on healthcare professionals to care for them. This study needs to be conducted in order to better understand the relationship that exists between job satisfaction, burnout, and intent to leave among nursing professionals. A better understanding of how job satisfaction, burnout, and stress among nursing professionals contributes to their intent to leave the profession may provide insight into different modalities designed to retain this population. By creating workplaces that are not as stressful and where job satisfaction is increased, thereby

allowing more nursing professionals to remain in their chosen profession, will lead to better patient outcomes and contribute to positive social change within this population.

Chapter 1 will provide a brief overview of my study. There is a background section, consisting of an historic, and current perspective, as well as some information related to the nursing shortage within the critical care setting. The problem, purpose, and research questions related to this study are addressed. An introduction to the theoretical framework underlying this work is established, with additional information provided in chapter 2. I describe the nature of the study, and define specific concepts related to this study. Assumptions, limitations, delimitations, and the scope of the study are addressed. Finally, this chapter concludes with information presented regarding the significance of the study and a summary.

Background

Historic Perspective

The current nursing shortage is not a new phenomenon. Historically, nurses have been in demand as a means of caring for the infirmed and dying during times of war and other worldwide disasters (Fee & Garofalo, 2010). As other medical professions have become more specialized, nursing has become increasingly a profession for which only females were employed and was seen, at least by some, as support for these other professions (West, Griffith, & Iphofen, 2007). Smeltzer, Vlasses, and Robinson (2005) described a shortage of nurses between 1949 and 1958 and related this shortage to the discrepancy between pay and the modern wage associated with other professions.

Although nursing has evolved from its origins, there have been times of shortage within this profession and this shortage continues to this day.

Current Perspective

There continues to be a current shortage of registered nurses. Siela, Twibell, and Keller (2009) described a shortage of nurses in 2004, despite the addition of an increase of 185,000 nurses gaining employment in a hospital setting since 2001, and attributed this nursing shortage to many factors, including the lack of qualified faculty, the number of enrollees in schools of nursing, and the slow rate of growth of registered nurses. The authors noted that burnout and dissatisfaction are contributing to this shortage and these high turnovers (as much as 13.9%) are affecting access to healthcare for some populations (Siela et al., 2009). In assessing the state of the current nursing workforce, as well as describing the workforce over the last 15 years, Buerhaus, Skinner, Auerbach, and Staiger (2017) acknowledged that a significant shortage of registered nurses (RNs) existed, totaling approximately 125,000 with a projected shortage by 2020 of 500,000 RNs. Coupled with this shortage in the early part of this century, the United States experienced a significant recession, which had the effect of pushing many Americans out of their jobs and keeping many older registered nurses that were considering retirement in their positions in order to support their families (Buerhaus et al., 2017). Now that the economy has stabilized, and with the addition of health care reform, this generation of registered nurses are entering retirement, and despite the rapid influx of registered nurses that have entered the workforce due to very successful campaigns, including Johnson and Johnson's *Campaign for Nursing's Future* (p. 229), the United States will once again

face many challenges related to the nursing workforce (Buerhaus et al., 2017). Juraschek, Zhang, Ranganathan, and Lin (2012) also support the notion of a severe shortage of registered nurses in the United States and the understanding that this shortage will continue to exist and worsen. By 2030, a national deficit of registered nurses employed in the United States may reach over 900,000, with the most severe droughts occurring in the western areas of the United States (Juraschek et al., 2012).

The baby boomer population within the United States is quickly approaching the age where the increased need for healthcare is likely to occur. The number of senior citizens representing this population is expected to grow by 75% between 2010 and 2030 (Grant, 2016). According to a 2014 study by the U.S. Census Bureau, the population aged 65 and over will grow to 83.7 million by 2050, which is almost double the current rate published in 2014 (American Association of Colleges of Nursing [AACN], 2014). This increased need for healthcare will lead to a corresponding need in nursing care. According to recent projections, the number of job openings is expected to increase from 2.7 million in 2014 to over 3 million by 2024 (AACN, 2014). An additional 649,100 nurses will be required to replace those that are leaving the profession, thereby bringing the total number of new nurses needed in the profession by 2024 to 1.09 million (AACN, 2014).

The current shortage has affected all nursing roles, and nurses within critical care settings have not been immune to this shortage. Turnover rates among critical care nurses are higher than that of the general hospital population, with some reports suggesting turnover rates anywhere from 25% to 60% (Mealer et al., 2014). A common

theme associated with critical care nurses that are leaving nursing is stress related conditions (Mealer et al., 2014).

Problem Statement

As many as 50% of new nursing graduates will decide to change jobs or leave the nursing profession within the first 3 years after graduating (MacKusick & Minick, 2010), which is due to factors including burnout, job fatigue, and stress. In examining stress in the workplace among registered nurses, Johnston et al., (2016) sought to better understand how stress affected the physiology and psychology of registered nurses. Research focused on two models related to work and stress, namely "demand-control and effort-reward imbalance" (author, p. 193) and the findings indicated that increased demand and effort contributed to increased cardiac rates, but not necessarily fatigue (Johnston et al., 2016). Additionally, when nurses have a perceived control over their work situation, they were happier, less stressed and not as tired (Johnston et al., 2016).

Stress in the nursing workforce does not only pertain to nurses employed in the United States. However, understanding how stress affects nursing, in general, may provide better insight into the relationship of stress, job satisfaction, and intent to leave among registered nurses. Kamau, Medisauskaite, and Lopes (2015) examined how registered nurses that are tired and are using absenteeism as a method of coping with stress in the workplace, as well as an intent to leave, may be prevented from leaving by providing the new registered nurse a course on job preparedness. Their study, conducted in the United Kingdom, proposed that nurses that were subjected to a course on how to handle stress from a mental health standpoint would be significantly more satisfied in

their positions, less likely to experience feelings of an intent to leave, and experience less stress than those who did not attend the same course (Kamau et al., 2015) and the results supported these findings.

Research conducted by a nursing organization in New Zealand (NZNO) validated that stress is a significant factor affecting job satisfaction and intent to leave (Stodart, 2015). This 2015 study revealed that over 50% of nurses working in New Zealand felt that they were not adequately compensated for the work that they performed and less than 50% surveyed felt that staffing was adequate to support the patient demand (Stodart, 2015). The stressors facing this workforce included bullying in the workplace and harassment, larger patient assignments, an unsafe working environment, and lack of leadership support are leading to increasingly lower levels of morale among nursing professionals and are leading to registered nurses actively seeking other means of employment (Stodart, 2015). In describing the degree to which turnover exists among this population, Stodart (2015) reported that 20% of those surveyed had changed positions within the previous 2 years and cited, among other things, a stressful job situation as that which contributed to their desire to transition.

Although a significant amount of research exists regarding job satisfaction, intent to leave, and stress, there are limited data as to what factors contribute to job satisfaction and intent to leave in the specialty areas of nurses working at the bedside in acute care facilities. Specialty areas in an acute care facility may include critical/intensive care, emergency, medical acute, surgery, and post surgery. Historically, one of the most significant factors influencing job satisfaction and the intent for nurses to leave the

profession, as presented by the literature, appears to be stress (Norbeck, 1985). Stress has continued to be a significant factor among registered nurses, especially critical care nurses, and their intent to seek other employment, and this is not unique to acute care facilities in the United States, but also in many other parts of the world (Myhren, Ekeberg, & Stokland, 2013). Although there has been an exhaustive focus on stress (Mooney et al., 2017) related to burnout among nurses working in the critical care, and intensive, and trauma intensive care units, there appears to be limited current information related to these combined factors and how they may contribute to the intent to leave among nurses working in critical care units as compared to their fellow nurses not working in a critical care environment (Ulrich, Lavandero, Woods, & Early, 2014). Further examination and evaluation of the factors related to job satisfaction and burnout and how these factors affect critical care nurses opposed to those not working in a critical care environment may lead to additional insight into nursing retention in specialty areas.

Purpose of the Study

The purpose of this research was to determine the relationship that exists between burnout, job satisfaction, and intent to leave in nurses who work in the critical care unit within an acute care hospital in Western United States and to examine the relationship of job satisfaction and burnout between nurses who work in critical care units, as well as intensive care units and neonatal intensive care units, compared to nurses who work in areas other than the critical care units, which included the emergency department, general nursing units, telemetry units, pediatric units, obstetrical units, and perioperative units (preoperative, intraoperative and immediate postoperative). The critical care units listed

included a cardiac intensive care unit (CCU), an intensive care unit (ICU), and a neonatal intensive care unit (NICU).

Research Questions

RQ1 – Quantitative: What is the relationship among burnout, job satisfaction, and intent to leave in nurses who work in the critical-care unit within an acute care hospital in the Western United States?

$H_0$1: There will be no relationship among burnout, job satisfaction, and intent to leave among nurses that work in the critical-care unit within an acute care hospital in the Western United States.

H_a1: There will be a relationship among burnout, job satisfaction, and intent to leave among nurses that work in the critical-care unit within an acute care hospital in the Western United States.

RQ2: What is the difference among job satisfaction, burnout and intent to leave between nurses who work in critical care compared to nurses who work in areas other than the critical care units?

$H_0$2: There will be no difference among job satisfaction, burnout, and intent to leave among those working in the critical care units and those who are working in other areas within the hospital.

H_a2: There will be a relationship among burnout, job satisfaction, and intent to leave among nurses that work in the critical-care unit within an acute care hospital in the Western United States.

RQ1 was correlational and, as such would not infer any cause and effect examination. The second research question sought to compare the corresponding rates of job satisfaction, burnout, and how this influenced intent to leave between nurses who work in a critical care setting and nurses who worked in other settings within the acute care facility as it related to job satisfaction, burnout, and intent to leave. Additional demographic variables were included in order to determine if confounding variables existed relating to the variables being examined. All of the variables were analyzed using SPSS for Windows and MacIntosh and multiple regression analysis was performed (see Green & Salkind, 2014).

Theoretical Framework

The theoretical underpinning that guided this research was modeling and role modeling theory. This theoretical approach, envisioned by Erickson, Tomlin, and Swain (1983), uses concepts from Maslow's hierarchy of needs theory and allows for the concept that certain common ideals exist among people. These ideals include basic needs, the common need of acceptance, while also maintaining a certain level of independence, the need for attachment and the realization of loss (Erickson et al., 1983). The theorists accounted that certain differences exist among people, including peoples' worldly perceptions that are based on individual experiences, social status, and individual knowledge (Erickson et al., 1983). Differences also exist in adaptation and how one adapts to stressors, as well as the self-care process and the resources that one possesses for self-care. The theorists also described how modeling and role modeling contribute to the nurse and patient relationship (Erickson et al., 1983); these and additional information

regarding these and other concepts related to this theory will be presented in Chapter 2. Although the basic premise of this nursing theory was originally envisioned to consist of interactions between the nurse and the patient, the basic concepts and ideals of this theory could be used to explain why nurses who are stressed and feel overworked and underappreciated choose to modify or adapt to their current work environment by selecting a mechanism to change their current situation and leave the position in favor of another position. Conversely, as described by the theoretical implications associated with worthiness, those who feel valued and appreciated will find acceptance and will be less likely to wish to find other job opportunities. The primary hypothesis that was tested is that registered nurses working in a critical care setting within an acute care hospital in the Western United States will experience higher levels of job satisfaction, and a lower rate of burnout within the critical care units within an acute care hospital in the Western United States and have a reduced rate of intent to leave than the other nursing units within the same acute care hospital setting. More detail on the modeling and role modeling theory is included in Chapter 2.

Nature of the Study

This study had two foci. RQ1 proposed a descriptive study to examine whether a relationship existed among burnout, job satisfaction, and intent to leave in nurses who worked in the critical-care unit within an acute care hospital in the Western United States. Job satisfaction was measured using a job satisfaction survey tool that included Likert scores, multiple choice answers, and specific demographic analysis questions and has

previously been used to study professionals working in healthcare. Survey data was collected from a self-report questionnaire.

RQ2 2 was a non experimental, correlational, descriptive study that compared intent to leave, job satisfaction, and burnout among nurses working in critical care units to those nurses who not working in a critical care environment. The data were separated according to specific units within the facility and specific demographics, but allowed for anonymity in that no identifying characteristics of individuals was collected. This study was limited to nursing professionals that were working in one acute care hospital in the Western United States and the educational level of the participants included associate's degrees, bachelor's degrees, master's degrees, and Ph.D.

Definitions

Acute care hospital: A healthcare facility that exists to treat patients for a relatively short but active period of time requiring emergency care, medical care, surgical care, obstetrical care, or intensive/critical care (Southwest Mississippi Regional Medical Center [SRMMC] website, 2018)

Burnout: A prolonged response to the mental, physical, and emotional aspects of work stressors characterized by a feeling of fatigue, pessimism, and disdain for work (Maslach, Schaufeli, & Leiter, 2001).

Critical care nurse: A RN that has been given specialized training to care for the severely infirmed, sick patient (Bridges, McNeill, & Munro, 2017). Some examples of this specialized training may include care of the acute tracheostomy patient, the ventilated patient, the patient requiring constant cardiac monitoring, as well as the patient

that is immediately postoperative from cardiac surgery and any patient that is hemodynamically unstable and requiring close monitoring. Critical care nurses are also known as ICU nurses (Gaffney, 2015).

Critical-care unit: Also known as an intensive care unit (ICU), a critical care unit (CCU) is a specialty unit within an acute care hospital that provides specialized medical equipment and staff to provide intensive, life saving treatment to patients that are in a severely infirmed capacity (U.S. National Library of Medicine website, 2017). Within the healthcare facility where the research will be conducted there exists a critical-care unit, an intensive care unit, and a neonatal intensive care unit (NICU). The CCU and ICU are operated in the same manner and treat the same population of severely infirmed patients while the NICU exists to treat the preterm newborn population, as well as newborns requiring intensive nursing supervision.

Emergency department: A unit either within an acute care facility or as a stand-alone unit that specializes in the care of patients that arrive without an appointment and are in need of immediate acute medical or presurgical care 24 hours per day (Lassiter-Edwards, 2018).

Job satisfaction: The extent to which one is content with his or her present employment (Alasmari & Douglas, 2012). This can include many facets, including pay, the nature of the work, opportunities for advancement and promotion, the relationships that exist among fellow coworkers, as well as the extent and type of supervision being given to the affected individual (Alasmari & Douglas, 2012).

Obstetric unit: A unit within an acute care hospital facility that specializes in the care and treatment of mothers who are laboring in preparation for the birth of a child, either vaginally, or via c-section approach (Griffin, Xia, Pen, & Keskinocak, 2011)

Pediatric unit: A unit within an acute care hospital facility that specializes in the care and treatment of a child (Roberts-Turner et al., 2014). A pediatric unit may be further delineated into a pediatric intensive care unit (PICU), or a neonatal intensive care unit (NICU).

Perioperative units: A term used to describe those units within an acute care hospital that specialize in the immediate pre-operative, intra-operative, and immediate post-operative treatment of the surgical patient (Brunges & Foley-Brinza, 2014).

Registered nurse (RN): A healthcare professional that has graduated from an accredited institution for nursing, has passed a National Council License Examination (NCLEX) and has been specifically trained to care for the sick, or infirmed (Graduate Nursing website, n.d.).

Satisfaction: The extent to which one is content with his or her present employment. This can include many facets, including pay, the nature of the work, opportunities for advancement and promotion, the relationships that exist among fellow coworkers, as well as the extent and type of supervision being given to the affected individual (Alasmari & Douglas, 2012).

Telemetry unit: A unit within an acute care facility that specializes in the continuous cardiac monitoring of patients (Jacksonville University Nursing website, 2017). Patients who are admitted to the telemetry unit may still be critically ill, but do

not require the same level of supervision as those patients that are admitted to the critical care unit.

Turnover: The number of individuals who are hired within a certain time period in order to replace those that have either left or have been dropped from the workplace. May also be expressed as a ratio to the average of a retained workforce (Brewer, Kovner, Greene, Tukov-Shuser, & Djukic, 2012).

Assumptions

An assumption of this study was that respondents answering the survey questions did so in an honest manner and answered based upon their own individual perspective without relying on others' input. Another assumption of this study was that critical care nurses desired a decreased level of stress and wanted to avoid burnout. A final assumption was that those who responded to the survey had an understanding about how to complete and submit an online survey without having to be given any training or orientation regarding the survey.

Scope and Delimitations

This study only considered RNs that were currently employed within one acute care hospital in the Western United States. Only RNs working at the bedside with an acute care hospital setting were considered. The survey was conducted over a 1 month time period and any partial submissions were discarded. Analysis of the data required 1 month and the remainder of the study was presented after one additional month. My study did not include other members of staff working in a hospital, nor did it include registered nurses who were not involved in patient care. My study did not include nurses

working outside of an acute care hospital facility, nor did it include registered nurses working in other areas of the United States, besides the Western United States.

The theoretical framework that guided my study was the modeling and role-modeling theory. This nursing theory was derived from numerous other theories and the theorists responsible for this theory viewed people as independent, holistic beings and understood that as people have needs, wants, and desires, whether they be basic or more advanced, and when the needs are not met, this creates stressors (Wills, 2014). Stressors require a response and an adaptation to the stressor ensues (Wills, 2014). How people (patients or nurses) react and adapt to stressors determines future interaction (Wills, 2014). Other theories that I considered were the critical social theory and social exchange theory, however, these theories were not in alignment with what I intended to study.

The population of this study included registered nurses that were working within one specific acute care hospital in the Western United States. The variables that were analyzed included job satisfaction, burnout, and intent to leave rates among RNs working in the various critical care units within the acute care hospital and job satisfaction, burnout, and intent to leave rates among registered nurses within the entire acute care hospital. The focus of the research compared rates of job satisfaction, burnout, and intent to leave in order to determine if critical care nurses are more satisfied within their position and less likely to obtain alternative employment over those nurses working in the remainder of the acute care hospital setting.

The research methodology used in this study was a quantitative methodology. Alternatively, a qualitative methodology might have provided a different insight into the lived experiences of registered nurses and how they deal with stressors that lead to dissatisfaction and the potential for seeking alternative employment.

Limitations

This study was limited in scope in that only one acute care hospital located in Western United States was used to conduct the study. Further, only registered nurses were involved as research participants in this study, thereby limiting the potential sample size. Every effort was made to obtain a sample that was of sufficient size to ensure that the results obtained were true and this was accomplished by the use of a power analysis. This study was limited by the methodology used in that the measure of job satisfaction may not be fully understood only in a quantitative nature.

Internal Validity Issues

The research participants were required to go online and spend the time to complete the survey by themselves without any undue outside influence from myself or anyone else affiliated with the participating facility. The survey was not able to differentiate the research participants' moods or demeanors when they were completing the survey, which may have potentially skewed the results. The data collection portion was expected to occur for a maximum of 4 weeks; however, research participants could have potentially changed positions and units within the hospital, a condition known as maturity (see Creswell, 2009). Alternatively, research participants may have completely left the facility and thus, unduly altered the results of the survey, a threat to internal

validity known as mortality (see Creswell, 2009). In order to address the threat of maturation and mortality, the survey questionnaire asked the research participant to think about the current position for which he/she was currently employed and asked whether the participant had plans to change positions or leave the facility within the next 3 months. If the participant chose to answer yes to this question, the results of this questionnaire were dismissed for this participant.

Also known as the internal threat of history (Creswell, 2009), certain events may have occurred that may have altered or skewed the results of the survey during any experimental process involving human subjects. In order to reduce this threat, all individuals were required to take the same questionnaire and the time frame was kept to four weeks in the hope that no significant events (good or bad) occurred during this time. Certain research participants may have reacted strongly and have had very strong opinions about the survey, leading to unnaturally positive or negative scores, a threat known as regression (see Creswell, 2009). Alternatively, research participants may have been selectively chosen in order to artificially skew the results in a certain way. Because both threats to the validity of the study could potentially occur, the participants were chosen at random.

External Validity Issues

The sample size for this study was limited to only one healthcare facility in the Western United States and is, therefore, not generalizable to all other healthcare facilities. The sampling strategy used was a convenience sampling, which may have potentially skewed the results in that it may not have represented the entire community of staff RNs.

Finally, those who did not wish to complete the survey may have further limited the sample size.

Significance

Finding innovative ways to retain the existing nursing workforce has been the focus of healthcare facilities both nationally and worldwide. However, within the United States there exists an enormous concentration of public and private universities and community colleges that exist to graduate nursing students who will enter the nursing profession. Data provided by the National Council of State Boards of Nursing shows that in 2017, 157,736 students from schools in the United States were administered the national licensing examination for nursing (NCLEX) and of this number 137,412 successfully passed the examination the first time (National Council of State Boards of Nursing [NCSBN], 2017, table 8).

According to the latest figure published by National League for Nursing (2018), in 2014 22% of qualified candidates were not admitted to schools of nursing and the primary reason was due to the lack of qualified faculty. In addition, many registered nurses who decide to leave the profession after earning their degree and licensure contribute to the nursing shortage (MacKusick & Minick, 2010). The data supported the idea that adding more nurses to the workforce in order to alleviate the nursing shortage is not working. It is evident that in order for change to occur, alternative methods of retaining the existing nursing population must be explored. Examining factors that contribute to better job satisfaction and intent to leave may result in a decrease in the shortage and contribute to a better work environment among existing registered nurses,

thereby contributing to positive social change among this population. In a study conducted by MacKusick and Minick (2010), the researchers examined why so many relatively new nurses sought to leave the nursing profession and determined that a variety of reasons were attributed to their departure. In describing the concept of burnout syndrome among critical care nurses, Moss, Good, Gozal, Kleinpell, and Sessler (2016) acknowledged that many factors contribute to burnout syndrome among this population of nurses including stress related to the work environment. The compendium of symptoms of burnout syndrome, including frustration, anger, fear, anxiety, feeling overwhelmed or feeling like there is no sense of accomplishment, contributed to a higher level of being tired, having more headaches, and ultimately may lead to an increased level of job turnover (Moss et al., 2016). An analysis of the factors that affect job satisfaction and reduce burnout among critical care nurses and then comparing these results to nurses who work in an area other than critical care units may provide a unique perspective regarding burnout and intent to leave and appears to provide a current gap in the exiting literature.

Job satisfaction rates among nursing professionals employed within the hospital environment continues to be lower than any other profession within the United States (Roberts-Turner et al., 2014). Nurses in the United States and elsewhere are choosing to leave the bedside and the nursing profession at a time when the baby boomer population is reaching the age of requiring increased nursing care (Grant, 2016). Research needs to be conducted in order to determine ways to retain bedside nurses. By conducting this research, positive social change will occur, not only as a means of retaining nursing jobs,

but also being able to adequately care for the aging population requiring nursing care within the local communities of the Western United States and may potentially contribute to further research in other communities.

Summary

Nursing is a rapidly growing and under employed profession. Various reasons exist regarding insufficient registered nurses employed to care for patients within the United States. However, rather than relying on nursing schools to continue producing registered nurses that decide to leave the nursing profession due to dissatisfaction and burnout, it is necessary to examine factors that contribute to job satisfaction and reduce burnout among registered nurses. Rate of job satisfaction, burnout, and intent to leave can be measured in a quantitative fashion and a quantitative methodology was used in this study.

Critical care registered nurses are highly specialized nurses that work with an extremely sick population, which potentially contribute to higher levels of stress and potentially a higher rate of burnout. Critical care registered nurses have also received additional training in how to properly care for this infirmed population and, as such, may have become less sensitive to these stressors. There may be additional factors that contribute to job satisfaction and intent to leave among this population of nurses, and this will require research in order to ascertain whether critical care registered nurses have a higher rate of job satisfaction and retain their jobs better than nurses that are working in other units within the acute care hospital setting.

The focus of this chapter has been to provide an introduction to a research proposal designed to examine factors related to job satisfaction and intent to leave among a particular nursing population. A compilation of thoughts and ideas has been presented in a manner to provide clarity and insight into how this research might proceed. Chapter 2 contains a literature review related to job satisfaction, burnout, and intent to leave, and how this affects the nursing profession.

Chapter 2: Literature Review

Introduction

In this review of the existing literature, I examine the relevant information that relates to the concepts associated with job satisfaction, job retention, intent to leave, and burnout. Emphasis will be directed towards nursing and the specific setting of an acute care hospital. A review of the literature related to modeling and role modeling theory will also be provided. Understandably, one of the biggest predictors of intent to leave among nursing professionals is the role of leadership in managing this population (Breau & Rheaume, 2014). However, the environment in which the registered nurse is employed also is a factor in determining whether the nurse intends to leave for a different opportunity (Shimp, 2017). Understanding why registered nurses leave the bedside is so important for many reasons. One of the most important reasons is because the high cost associated with turnover, which includes the costs associated with the recruitment, training, and retention of a replacement, a loss of the knowledge level and experience of the existing nurse, and the need to pick up the void that is left when the nurse leaves, often resulting in overtime, which can have a negative impact on the care of the patient (Larrabee et al., 2003). Sawatsky, Enns, and Lagare (2015) agreed and added that the shortage associated with nurses leaving the bedside has a drastic effect on every facet of the healthcare delivery system, which includes economics, staff morale, how patients are provided care, and productivity. The financial cost associated with turnover can be significant, with some previous estimates of $64,000 associated with replacing a critical care nurse, a burden that must be absorbed over a period of time by increasing premiums

for insurance and out-of-pocket expenses for patients (Apker, Propp, & Zabava Ford, 2009). A more recent study conducted by Nursing Solutions Incorporated (NSI; 2016) published the average cost associated with nursing turnover ranged from $37,700 to $58,400 and the survey indicated that critical care nurses are slightly more likely to experience turnover (17.7%) versus the average turnover rate of nursing (17.2%). Although a significant amount of research exists regarding the individual topics of job satisfaction, intent to leave, and burnout, there are limited data as to how these combined factors influence the specialty areas of nurses working at the bedside in acute care facilities. The purpose of this research was to determine whether a relationship existed between burnout, job satisfaction, and intent to leave in nurses who work in the critical care unit within an acute care hospital within a specific community in the Western United States. An additional purpose was to examine and compare the rates of job satisfaction and burnout between nurses who work in CCUs, ICUs, and NICUs, compared to nurses who work in areas other than the critical care units. The other units studied included the emergency department, general nursing units, telemetry units, pediatric units, obstetrical units, and perioperative units (preoperative, intraoperative, and immediate postoperative).

Chapter 2 provides a review of the existing literature, which examines the relevant information that relates to the concepts associated with job satisfaction, job retention, intent to leave, and burnout. Emphasis is directed towards nursing and the specific setting of an acute care hospital. A review of the literature related modeling and role modeling theory is provided.

Literature Search Strategy

To provide a comprehensive review of the literature, an initial query of the databases included CINAHL and MEDLINE, ProQuest, OVID, and PubMed. The databases were accessed through the interface provided by the Walden University library. Google Scholar was also used as a resource for finding some of the earlier material. The initial search criteria included the Boolean phrases *nursing, job satisfaction, intent to leave,* and *retention*. Results were limited to full text, scholarly (peer reviewed) journals, and dissertations and included only those articles that were written in English. Using the Boolean phrase of *nursing* with the individual factor of *job satisfaction* from the combined databases of CINAHL and MEDLINE elicited a return of 5,099 articles. Combining the above Boolean identifiers and searching the same database produced 34 results and the same search from ProQuest produced 3,723 results. Limiting the search to date range of 2012 – 2018, and limiting other outliers, including nursing faculty, practitioners, education, and assistant, as well as limiting the results to studies performed in the United States provided a more manageable list of 462 results, including 197 dissertations and theses from which to conduct a review. The review began with a better perspective on the theoretical foundation associated with the study. An historical perspective of job satisfaction, burnout, and intent to leave among nursing was provided. Initially, abstracts were reviewed to determine the relevance to the research and the research was selected and chronicled according to the relevance to the setting and search phrases. The review was subdivided according to the different aspects that appeared to have an influence on job satisfaction in nursing.

Theoretical Foundation

Modeling and Role Modeling Theory

A search was undertaken to find any references to modeling and role modeling theory, which was narrowed to 578 articles. From this group, a selected number of articles were examined to better understand the role that modeling and role modeling theory affects job satisfaction, turnover, and intent to leave among nursing professionals.

Overview of the Theory

The modeling and role modeling theory, established by Erickson, Tomlin, and Swain in 1983, is a middle range nursing theory which was synthesized from a number of philosophical ideas, including those of Maslow, Paiget, Bowlby, Erickson, Engel, and Selye (Erickson et al., 1983) and was drawn from numerous other nursing theories. Erickson (2018) developed this theory as a means of understanding the health of a patient based upon basic needs, growth, loss, how the person adapts to the environment, how the person develops, and how the patient is cared for as an entire and whole being. Erickson recognized that human beings shared many things in common with each other and had many differences with each other, as it related to worldview, health promotion, self-care, and basic needs. The basic tenets of the theory include holism, affiliated individuation, need satisfaction, growth, and development, internal and external resources, modeling, role modeling, self-care knowledge, self-care resources, and self-care actions (Erickson et al., 1983). Holism refers to the entire person as a thinking, acting, active, physical, emotional, and spiritual being and nursing is a means of caring for the whole person in relation to their self-care activities and health (Erickson, 2018). Affiliated individuation,

a term coined by Erickson, refers to the idea that a person has a need to be dependent on support systems, while at the same time maintain an independence from these same support systems. Erickson theorized that every human being requires basic needs, and as needs are met, this leads to developmental growth and adaptation; further, unmet needs create stressors and require a response to the stressor (Erickson, 2018). Human beings are in a constant state of change, which leads to loss and grief (Erickson, 2018). Grief is a process and the ability to respond to grief and mobilize the necessary internal and external resources determines how the response to grief will be attained (Erickson, 2018). In caring for patients, nurses try to understand the patient's personal worldview and to appreciate the view as the patient's perspective, a concept known as modeling (Erickson, 2018). Once the nurse has an understanding for the patient's worldview, a caring environment is established that seeks to provide the patient with a promotion of health through direct nursing interventions, a concept known as role-modeling (Erickson, 2018). Figure 1 describes the relationship that exists among the various constructs of the modeling and role-modeling theory (Erickson, 2014, p. 308).

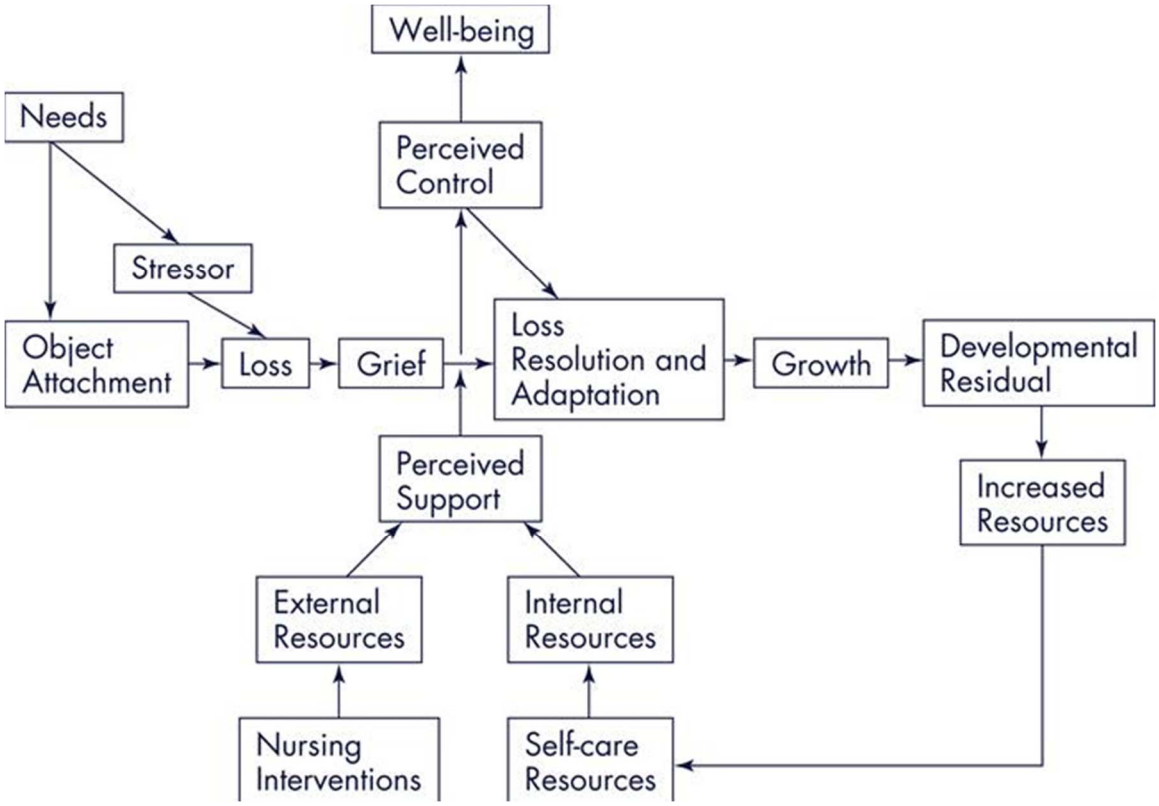

Figure 1. Relationship of the constructs of the modeling and role-modeling theory. Adapted from "Modeling and Role-Modeling Theory in Nursing Practice" by M .E. Erickson, in M.R. Alligood (Ed.), *Nursing Theory: Utilization & Application* (5th ed. p.308), 2014, St. Louis, MO: Elsevier. Copyright 2014 by Mosby. Reprinted with permission from Elsevier.

Although this theory was designed as a means of better understanding patients, it can easily be adapted to view relationships between nursing professionals, nursing leaders, and bedside staff nurses. The ideas behind the theory can help researchers determine how nurses respond and adapt to distressors and stressors within their environment, the concepts of basic needs, and feelings of inclusion and worthiness, which can be construed as empowerment within the profession of nursing (Erickson, 2018). Despite being multi faceted, the modeling and role modeling theory provides

valuable insights into how individuals handle stress and conflict and, as will be presented, has also been applied to nursing practice.

Modeling and Role Modeling Theory in Practice

The first documented use of this theory by Erickson and Swain (1990) focused on the application of nursing interventions among an experimental population of ten individuals with hypertension and comparing this group to another group who did not receive the same intervention. The researchers determined that using the tenets of the theory as a basis for providing patients with sound nursing interventions as a means of self help can elicit some well being (Erickson & Swain, 1990). However, the limitations to this study were numerous and included the size of the study, as well as the lack of randomization and further research was required.

A few studies using this theory are devoted to the student nursing perspective associated with becoming a more holistic nurse. Using modeling and role-modeling theory, as well as other supporting theories, as a conceptual framework, Gregg and Twibell (2015) described how advanced practice nursing students in a program used a strategy known as Try-It-On to learn and then teach stress management techniques to their patients. Students were provided the Try-It-On education as a tool, were asked to implement the tool, and were initially asked to comment as to the effectiveness of the tool (Gregg & Twibell, 2015). An additional pilot quantitative survey was developed consisting of eight questions to evaluate the degree of effectiveness of the tool and nine students were asked to complete the survey (Gregg & Twibell, 2015). The results of the survey indicated that students who used the tool as a means of stress management felt

that they were better prepared and students who teach these stress management techniques to their patients will be valuable for their practice (Gregg & Twibell, 2015). This research clearly demonstrated that the use of the modeling and role modeling theory as a theoretical framework can help researchers understand stress management and the nursing profession.

Perese (2002) described the use of modeling and role-modeling theory as a theoretical underpinning to incorporate psychiatric nursing into a baccalaureate nursing curriculum at the University of Buffalo. Perese acknowledged that a fear existed regarding subjecting undergraduate nursing students to psychiatric nursing, as it may disincline them to wishing to pursue an advanced degree in psychiatric nursing, but this fear was eliminated by the need to treat a patient as a holistic human being. The curriculum was developed and integrated into students' junior and senior years of nursing school and was designed to integrate with the other existing nursing curricula (Perese, 2002). Perese summarized that, although this new curriculum was not easily synthesized into other curricula, there was still a need to incorporate psychiatric nursing as a part of educating undergraduate students and suggested that perhaps a separate course in psychiatric nursing would be appropriate. Even though Perese's work was limited to nursing students and their fear associated with psychiatric nursing, this research provides an example of how researchers use a theoretical framework to describe a human condition and this research supports the current research study.

Woodward (2003) focused on the value of promoting theory as part of the educational process for nursing students. Woodward cited modeling and role-modeling

theory as a valid framework for instruction, due to similarities and dissimilarities that exist between people, one of the basics of Erickson's model. Woodward suggested that there is value in instructing nursing students in nursing theory and asking them to apply these theories in practice, such as modeling and role-modeling theory. Nurses who use nursing theory in their practice tend to remain within the profession and are "professionally resistant to those practices which drive nurses away" (Woodward, 2002, p. 215). Woodward's research provided a further example of using the modeling and role modeling theory as a theoretical framework for understanding nursing students' needs, and the needs of the nursing professional.

Another ideation of modeling and role modeling theory and the role it potentially plays in interaction between the bedside staff nurse and nursing leadership was completed by Arruda (2005). Arruda described one facet of the theory, namely modeling, as a means for nurse leaders to better understand the worldview of their staff and, in turn, develop specific interventions into providing for staff retention. In acknowledging that a serious shortage exists in nursing, Arruda provided for five commonalities that exist between nursing leaders and bedside nurses, which include "building trust, promoting positive orientation, promoting perceived control, promoting strengths, and setting health-directed mutual goals" (p. 16). Using Maslow's hierarchy of needs as a background, Arruda provided input as to staff satisfaction as a means of reducing turnover and promoting retention. Arruda's research provided an ideal use of modeling and role modeling theory as a framework for describing job satisfaction, retention and the interactions that exist

between nursing leadership and staff and the current research provides further support for this earlier work.

Literature Review Related to Key Variables and/or Concepts

Historical Perspective of Job Satisfaction, Burnout and Intent to Leave in Nursing

The nursing profession continues to face a shortage of qualified registered nurses. The American Nursing Association (2017a) reports that this shortage will continue, and predicts that this shortage will likely peak around 2020. The shortage can be attributed to many reasons, including an aging workforce (Friedrich, Prasun, Henderson & Taft, 2011), and qualified registered nurses who are choosing to leave the profession for a variety of reasons (MacKusick & Minick, 2010). The shortage of qualified registered nurses is not only attributed to the last few years. Excerpts from an article published in 1965 in the New Yorker magazine reference a shortage that existed even at that time (Ledbetter, 2015). Although a shortage has existed for some time, and will continue to exist, what is clear is that methods designed to eliminate this shortage have done very little to combat the existing shortage. Researchers have examined many of the concepts associated with why this shortage exists and a comprehensive review of the existing literature follows.

Research conducted by Simms, Erbin-Roesemann, Darga, and Coeling (1990) used grounded theory to frame their study and the forced choice work questionnaire to better understand burnout and retention among registered nurses. The researchers collected data from a sample size of 168 nurses working within a variety of different nursing units in two teaching healthcare facilities and one long term care unit (Simms et

al., 1990). The researchers wished to understand how certain factors, i.e. demographics, educational level, number of years employed, the job setting, how many hours worked during the work week, and the type of practice, contributed to work excitement among this population of nursing (Simms et al., 1990). Interestingly, nurses who worked between 50 and 59 hours per week had more work excitement than those who worked 40 or less hours per week and nurses who worked in home care had the highest levels of work excitement, closely followed by those nurses working in the aeromedical subspecialty compared to critical care, general care, and rehabilitative care (Simms et al., 1990). Using these data, the researchers provided an algorithm consisting of four factors that would promote workplace excitement, which are staffing arrangements, development and growth, variety in the workplace, and conditions in the workplace (Simms et al., 1990). Although the current research does not discuss the concept of work excitement, the idea of being satisfied at work and being excited to be at work can be considered to be similar and, as such, the work of Simms et al. provided support for the concepts of job satisfaction.

Apker, Propp, and Zavada Ford (2009) conducted research to better understand the relationship that communication plays in determining job satisfaction and intent to leave among nursing professionals. The theory that these researchers posited is that nurses who have better communication with their fellow team members, physicians, and management, will feel more engaged and will be less likely to leave their position (Apker et al., 2009). Using a survey that focused specifically on communication, the researchers collected data within one hospital located in the Midwestern United States and focused

their research on teams consisting of registered nurses, physicians, patient care assistants, unit coordinators and charge nurses (Apker et al., 2009). The results of the study supported the hypothesis of better communication strategies among hospital teams will have an inverse affect on intent to leave among registered nurses. Apker et al., (2009) did acknowledge the limitations that existed, including the fact that the methodology used was limited to quantitative results, and that the survey the researchers used was designed to measure nursing perceptions. The research conducted by Apker et al. provided insights into how communication plays a significant role in retention of the nursing workforce and the current research supports this work.

Although job satisfaction is a concept that is not unique to the nursing field, there has been research specifically directed to job satisfaction among nursing professionals. In particular, the research conducted by Castaneda and Scanlan (2014) analyzed the concept of job satisfaction in nursing using the framework for concept analysis by Walker and Avant (2011) and found that the concept of job satisfaction is an appropriate reaction that an individual has and is related to actual outcomes compared to the expected outcomes that the individual has regarding different aspects of the job. The researchers acknowledged that, especially within the field of nursing, the concept of job satisfaction can be studied and measured within the hospital setting and job satisfaction as it relates to nursing has some special attributes related to ensuring safe care of the patient, relationships among coworkers, and the idea of independence within the practice of nursing (Castaneda & Scanlan, 2014). Although by no means complete, this research provided valuable insight into how the concept job satisfaction can be analyzed and the

idea of independence has similarities to the theoretical framework of modeling and role modeling theory, thereby further supporting the current research.

Hairr, Salisbury, Johannsson, and Redfern-Vance (2014) researched nurses working only in acute care hospitals and sought to compare staffing ratios to job satisfaction and whether a relationship exists between job satisfaction and nurse retention. Their quantitative research provided results that indicated that nursing staff are more satisfied when they are given an appropriate patient load and also provided input as to why nurses were not leaving their positions, despite declining populations of qualified nursing staff (Hairr et al., 2014). Although the concept of staffing ratios will not be presented in the current research, it should be recognized that there are many facets to job satisfaction and the research conducted by Hairr et al. provides additional awareness of the breadth of job satisfaction and intent to leave among nursing professionals.

To study how the nursing practice environment has been affected over a period of time, Roche et al. (2016) conducted research across six different acute care hospitals in Australia during two different time frames between 2004 and 2013. This quasi-experimental design used the patient care delivery model as a conceptual framework to determine how the work environment has changed over a period of time among nursing professionals (Roche, et al., 2016). The results revealed that satisfaction among registered nurses working during these two time frames significantly decreased as it related to the practice environment (Roche, et al., 2016). Nurses did report higher levels of job satisfaction and lower levels of intent to leave during the second round of surveys, but this might have been confounded by the lower percentage of nurses stating that it

would be easy to find another position (Roche, et al., 2016). Additionally, nurses felt a higher level of instability in their job environment during the second round of surveys (Roche, et al., 2016). This research not only provided clear indications regarding the role that job satisfaction can have on intent to leave, but also demonstrates how job satisfaction rates and rates of intent to leave a position can vary over time depending on extenuating factors.

Job Satisfaction and Critical Care Nursing

Critical care nursing presents different challenges related to job satisfaction. Critical care nurses are responsible for caring for patients that are critically ill and will potentially succumb to their injuries if not properly treated (University nursing careers website, 2017). Caring for this population requires individualized care and, as such, can lead to some unique consequences related to patient care. Two unique consequences provided in the literature are "compassion satisfaction" and "compassion fatigue" (Sacco, Ciurzynski, Harvey, & Ingersoll, 2015, p. 33). Compassion satisfaction refers feelings of happiness and content after helping someone deal with traumatic situations, while compassion fatigue has been attributed to higher levels of stress and burnout among critical care nurses (Sacco et al., 2015). In using a tool that measures these two concepts, the researchers found that within the critical care setting of a hospital located in the State of New York, compassion satisfaction scores were higher and compassion fatigue scores were lower among nurses working with patients that all possessed the same level of acuity (Sacco et al., 2015). Critical care nurses that are more experienced exhibited lower levels of compassion fatigue then their younger, less experienced counterparts

(Sacco et al., 2015). Although the researchers used the verbiage of compassion satisfaction and compassion fatigue, these concepts are very similar to job satisfaction and burnout, respectively and this research further supports the current research study.

In a similar study conducted by Mooney et al. (2017) the researchers analyzed comparisons in compassion satisfaction (CS), compassion fatigue (CF) and Burnout (BO) among nurses working in critical care settings and nurses working in an oncology unit within a community hospital in Lancaster, Pennsylvania. Using the same tool as Sacco et al., the results of this research indicate a statistically lower level of CS and higher levels of BO among ICU nurses compared to oncology nurses, while the study found no statistical difference occurred for CF among these two units (Mooney et al., 2017). Mooney et al. (2017) found similar lower levels of CF related to years of experience among critical care nurses, thereby supporting the research conducted by Sacco et al. and also supporting the current research.

Acknowledging that healthy work environments within nursing units contributes to better patient outcomes (Ulrich, Lavandero, Woods, & Early, 2014), the American Nurses Association (2017b) defines a healthy work environment as a place in which a nurse feels empowered, safe, and satisfied. As an adjunct to this, the American Association of Critical-Care Nurses (AACN) provides six values associated with a healthy work environment, which include communication, collaboration, decision making, staffing, recognition, and leadership (American Association of Critical-Care Nurses, n.d.). These values were initially established by a panel of experts within the AACN in 2005 because the panel acknowledged that the lack of these values contributed

to decreases in safe patient care, decreased quality associated with patient care, and lower levels of job satisfaction (American Association of Critical-Care Nurses, 2016). The adoption of these values has led to three surveys that have been submitted to members of AACN to better understand the types of work environments that critical care nurses experience (Ulrich et al., 2014). An analysis of the 2013 survey revealed similar demographics to the previous two surveys conducted in 2006 and 2008 and of the six core values represented by the survey, all of the mean scores associated with the values declined from 2008 to 2013 (Ulrich et al., 2014), thereby indicating a decrease in the health of the work environment among this population of nurses. The survey also asked specific questions related to job satisfaction and the results showed that job satisfaction has significantly declined since 2008 (Ulrich et al., 2014). In what is perhaps the most concerning indication related to job satisfaction among critical care nurses, Ulrich et al. (2014) found that of the research participants queried, 21.3% indicated that they would leave their current position within the next 12 months and the primary reason that they would consider not leaving their current position is better leadership, followed closely by better staffing. Ulrich et al. (2014) contextualized the three studies by pointing out that in 2006 the U.S. was in the middle of a nursing shortage but the effects of the combined recession forced some experienced nurses that had retired back into employment. As a result, it became more difficult for new graduates to find employment as quickly as they would have had the retired population not re-entered the workforce (Ulrich et al., 2014). In 2013, however, the economy had improved significantly and nurses were again retiring, hospitals were again hiring more recent graduates and the demand for nurses

once again far exceeded the supply, thereby contributing to the shortage. This research provided further indication of the importance that job satisfaction and burnout play in determining intent to leave among nursing professionals and also demonstrated that although there are many factors that contribute to intent to leave among nursing professionals, job satisfaction and burnout are certainly central to the discussion and the current research further supports this study.

Turnover and Retention

Shimp (2017) conducted a systematic review of the literature to identify themes associated with turnover, retention, and the role that managing the effectiveness of human capital plays in staffing among nursing units. The results of this review include the associated costs of turnover and the impact that this can have upon the success of healthcare facilities (Shimp, 2017). Shimp (2017) posited one idea for affecting turnover within organizations is to "increase retention" (p. 241) and further postulated that, to increase retention, nurses must have a feeling of empowerment, thereby creating a better work environment, which leads to increased job satisfaction. Another finding associated with reduction of turnover among nursing units is the idea of further education, including obtaining an advanced degree, or even internal educational opportunities, such as clinical ladders or other training within the individual units (Shimp, 2017). Shimp (2017) identified the role that leadership plays in employee retention and noted the importance of a trusting relationship in which leadership is approachable and allows the nurse to have a feeling of empowerment. The interactions and relationships between nurse and physician, as well as participation in a teamwork environment that fosters collaboration

were concepts suggested for further analysis (Shimp, 2017). Recognizing the staff by means of praise and rewards for a job well done was another way of rewarding staff. Shimp (2017) recognized that these rewards may come in many forms, from simple "thank you's" to the staff to more elaborate celebrations from leadership. This research provided significant vision regarding the concepts of job satisfaction, retention, and how everyone has a role in ensuring that staff feel appreciated, which leads to higher retention rates and this research provides further support for the current research study.

Intent to Leave

Cortelyou-Ward, Unruh, and Fottler (2010) conducted research to determine what affect the work environment had on registered nurses' intent to leave. The sample consisted of 259 registered nurses who were working in all areas of the hospital during a five-month period of time. (Cortelyou-Ward et al., 2010). Using the Nursing Work Index revised tool and the intent to leave scale by Blau, the researchers distributed surveys during work hours at meetings and huddles within the facility, with a sample totaling 85 participants from a population of 259 nurses (Cortelyou-Ward et al., 2010). The results showed that the work environment had a negative effect on intent to leave among this population (Cortelyou-Ward et al., 2010). Further analysis showed that the participants who had positive feelings towards the work environment, those with an advanced degree, and those who were either "married, divorced or widowed compared with single (p. 189) had a significantly lower score on intent to leave. The limitations to the study were the small sample size and limited to the geographic region where the study was conducted. The researchers stated that their research may not be similar to other

populations of nurses (Cortelyou-Ward et al., 2010). Despite these limitations, this research demonstrated how job satisfaction can influence intent to leave and provides additional support for the current study.

Armmer and Ball (2015) sought to better understand the relationship that exists between horizontal violence and nurses' intent to leave the profession. The sample consisted of 300 registered nurses in only one acute care facility located somewhere in the Midwestern United States (Armmer & Ball, 2015). The facility in which the research was conducted had recently been subjected to an educational campaign on lateral violence (Armmer & Ball, 2015). Roughly half of the participants in this study (48.1%) had reported that they had been in attendance during this educational opportunity, which may have played a role in their willingness to complete the survey (Armmer & Ball, 2015). Using specific questions from the Brile's Sabotage Savvy Questionnaire, and Michigan Organizational Assessment Questionnaire, the research team created a customized questionnaire that was mailed to the participants and 104 nurses completed the survey (Armmer & Ball, 2015). The results indicated that all nurses, regardless of tenure or experience, had been subjected to some form of horizontal violence and the data supported the positive correlation that existed between horizontal violence and intent to leave (Armmer & Ball, 2015). Nurses with more time in the profession were more likely to have experienced some sort of horizontal violence and registered nurses with more experience and longer tenures were less likely to leave their current positions due to horizontal violence than those nurses who were younger and not as experienced (Armmer & Ball, 2015). Of the entire population surveyed, 28.8% indicated that they would vacate

their current position within one year (Armmer & Ball, 2015). Considering the substantial investment, both financial as well as time, spent in educating and training new nurses, this is a serious concern for healthcare facilities. Since this study was only conducted at one facility in one area of the country, further research is needed, but there appears to be similarities between horizontal violence and job satisfaction in that they each can have an affect on intent to leave and this research further supports the current study.

Job Satisfaction, Burnout, and Intent to Leave In The Critical Care Environment

There was a limited amount of available literature that described the intent to leave among critical care nursing. Fitzpatrick, Campo, Graham, and Lavandero (2010) conducted research to better understand the relationships that exist among critical care nursing, empowerment, the role of certification, and how all of this contributes to their intent to leave either their current position or the profession. The large sample size (6,589 respondents) was taken from the American Association of Critical-Care (Fitzpatrick et al., 2010). The researchers theorized that critical care nurses that had a higher feeling of empowerment and possessed a certification in their specialty would be less likely to leave their position or the profession (Fitzpatrick et al., 2010). The results demonstrated significantly higher levels of empowerment existed among American Association of Critical Care (AACN) certified nurses as compared to critical care nurses who were either certified by a different body or were not certified (Fitzpatrick et al., 2010). The sample population was divided into different ethnicities, including Asian, Caucasian, African American, Hispanic, and other and the results showed that those of Asian decent

had the highest level of empowerment, while those of other ethnicity had the lowest level (Fitzpatrick et al., 2010). Among the entire cohort that agreed to participate, 41% of the respondents indicated intent to leave their current position and 18.4% indicated that this would occur within the coming year, while 6.9% intended to vacate the profession (Fitzpatrick et al., 2010). Critical-care nurses who felt more empowered and those who possessed certification reported a significantly lower score of intent to leave (Fitzpatrick et al., 2010). Age and years of experience had a significant factor on intent to leave, with the older and those with more experience producing lower scores of intent to leave (Fitzpatrick et al., 2010). Limitations to this study included a restricted population of only critical care nurses with valid email addresses, as well as a preference given to the population of nurses who were likely to have a certification (Fitzpatrick et al., 2010). Altough this research focused on certification on intent to leave, the sample was drawn from the critical care environment and supports the current study. Further research is warranted to better understand intent to leave among this population.

In a similar study conducted in Canada by Breau and Rheaume (2014) surveys were sent to a research population consisting 1,697 nurses who were working in ICUs in various areas of Canada and 533 nurses agreed to participate. The reseearchers used the Nursing Worklife Model as a theoretical framework, and three research tools including the Practice Environment Scale of the Nursing Work Index, the Conditions of Work Effectiveness Questionnaire – II, and Minnesota Satisfaction Questionnaire (Breau & Rheaume, 2014). In opposition to the results of Ulrich et al., (2014) the results indicated that the work environment in which this population of nurses was employed was a

healthy work environment, and further supporting the research conducted by Fitzpatrick et al., (2010). Breau & Rheaume (2014) found that ICU nurses considered the environment in which they work to be empowering and found that the greatest sense of empowerment was the "access to opportunity" (p. 20). Breau & Rheaume (2014) found that this population found the least amount of empowerment from "formal power" and "support" (p. 20), thereby indicating the importance of quality nursing management as a means of support, which is congruent with previous research, including Ulrich et al., (2014). The results of this study were not congruent with Fitzpatrick et al., as a very low percentage (3%) of nurses reported their intent to leave their current position or place of employment and 69% reported that they had no intention of leaving their facility or unit with the most common reason for leaving being career advancement (Breau & Rheaume, 2014). A positive correlation existed between educational level, experience, and job satisfaction and Breau and Rheaume (2014) theorized one reason that ICU nurses tend to stay in their positions is because these nurses work very well as a team and there is a great deal of cohesion among nurses in these units. There was no differentiation between urban and rural facilities, and in the way that hospitals and units within the hospital were structured and managed could have produced bias (Breau & Rheaume, 2014). Finally, only nurses belonging to the Canadian Association of Critical Care Nurses were asked to participate, which could limit the generalizability of the study (Breau & Rheaume, 2014). This research provided meaningful awareness into the affects that work environment might have on job satisfaction and intent to leave among the nursing professional and provides further support for the current study.

Using the Conceptual Framework for Predicting Nurse Retention, Sawatsky, Enns, and Lagare (2015) conducted a mixed-methods study to identify some key factors in determining retention among nurses working in the critical care environment. The population surveyed included only critical care nurses working in Manitoba, Canada, in 2011 and included primary and intermediary factors, which consisted of job satisfaction, a caring attitude, how engaged the nurse felt, and the quality of life associated with the profession (Sawatsky et al., 2015). In opposition to the study conducted by Breau and Rheaume (2014), the results of this research indicated that 24% of those surveyed would likely leave the critical care environment within the next year and that many of the factors that were making them leave the units were related to the intermediary factors, including job satisfaction (Sawatsky et al., 2015). The limitations of this research included the sampling strategy (convenience), the size of the sample (188), and since this study focused only on critical care nurses, it is unclear if these results can be attributed to other subspecialties of nursing, but the research does demonstrate that work environment itself does not determine job satisfaction, nor does it predict intent to leave among nursing professionals and therefore this study also provides support for the current research study.

Summary

The concepts surrounding job satisfaction, turnover, retention, and intent to leave among the nursing profession, while interrelated, were also multifaceted and varied in their nature. The literature showed that a shortage of available nurses does exist (MacKusick & Minick, 2010), and that some research had been conducted to understand

why nurses, including critical care nurses, are leaving the bedside. These reasons were multifactorial, but include a lack of job satisfaction (Sawatsky et al., 2015), as well as how empowered or engaged the nurse felt in performing his or her duties (Shimp, 2017), (Sawatsky et al., 2015), (Breau & Rheaume, 2014), (Fitzpatrick et al., 2010). Nurses who felt threatened in their position were more likely to experience lower job satisfaction, burnout, and were likely to have an increased desire to leave their current job situation and perhaps the field altogether (Armmer & Ball, 2015), (Cortelyou-Ward et al., 2010) and leadership had a significant role to play in determining whether nurses' levels of job satisfaction and intent to stay (Shimp, 2017), (Ulrich et al., 2014). Rather than relying on nursing schools to educate more nursing students as a means of increasing the available nursing workforce, perhaps finding alternative means of retaining the existing population and registered nurses may be the solution to this shortage, especially within the specialty care services of nursing, such as critical care. Although some research has been conducted regarding the phenomena surrounding job satisfaction, burnout and intent to leave, due to many limitations from the existing literature, including but not limited to small sample sizes, sampling strategies used, and geographical locations for the research, there were still opportunities, especially within the specialty areas, to provide further elucidation as to the many factors affecting nursing retention, keeping nurses happy, and decreasing burnout. Research was required to better understand what contributed to job satisfaction and intent to leave among critical care. Further, as a means of determining what differences existed among critical care nursing and other areas of nursing within the acute care setting as it related to job satisfaction and intent to leave, further research was

certainly warranted. To affect positive social change, research had to be conducted. Chapter 3 addressed the methodological approach for conducting this research.

Chapter 3: Research Method

Introduction

The purpose of this research was to determine whether a relationship existed between burnout, job satisfaction, and intent to leave in nurses who worked in the critical care unit within an acute care hospital in Reno, Nevada. An additional purpose was to examine the relationship and compare the rates of job satisfaction and burnout between nurses who worked in CCUs, as well as ICUs, and NICUs, compared to nurses who worked in areas other than the critical care units, which included the emergency department, general and oncology nursing units, cardiac catheterization, radiology, medical and cardiac telemetry units, pediatric units, mother baby and post partum units, behavioral health, and perioperative units (preoperative, intraoperative, and immediate postoperative). Chapter 3 provides information related to the methodology of the current research study. Information is presented regarding the research design and rationale, the methodology of the study and threats to the validity of the study and the chapter concluded with a summary of the research design, methodology, and the method of inquiry.

Research Design and Rationale

Variables

The predictor variables for the research questions were job satisfaction and burnout, and the outcome variable was intent to leave. The relationship among these variables was tested in nurses who work in ICU and acute care settings outside of ICU, including emergency room, general nursing units, cardiac catheterization, radiology,

telemetry, pediatric, obstetrics, and perioperative. The first question was correlational in design and focused on critical care nurses working within one facility in the Western United States and whether the relationship existed between job satisfaction, burnout, and intent to leave. The second question sought to compare the corresponding rates of job satisfaction, burnout, and how this influenced intent to leave between nurses who worked in a critical care setting and nurses who worked in other settings within the acute care facility as it related to job satisfaction, burnout, and intent to leave.

Research Design

This research design was quantitative, descriptive, and correlational. A quantitative research methodology uses numerical data to examine social phenomena, and the generated data are statistically analyzed in order to determine if the researched phenomena can be true (Yilmaz, 2013). My research was not testing an intervention and the research did not seek to provide influence over the independent variable, so it was considered nonexperimental (see Polit & Beck, 2012). A descriptive correlational design is one in which a researcher seeks to define, describe, and document specific variables that exists between two distinct groups (Polit & Beck, 2012). Based upon this definition and the research questions, a descriptive correlational design was the appropriate methodology for this study. The choice of this design allowed for prompt collection of data and there were no constraints associated with time. In terms of resources, there were no other resource constraints that hindered the progress of this research.

Methodology

Population

The selected acute care facility for this research study was located in the Western United States. The research site was a for-profit organization consisting of 380 beds and the healthcare facility provided a variety of in-patient and out-patient services including cardiology, emergency services, imaging/radiology, labor and delivery, laboratory services, neurology, NICU, oncology, orthopedics, surgery, including cardiothoracic surgery, pediatrics, primary care, pulmonology, as well as other services outside of the main acute care facility. There were approximately 700 registered nurses who were currently working at the bedside at this facility and were therefore eligible for this study.

Sampling and Sampling Procedures

The research design that I employed involved a convenience sample consisting of two different groups of registered nurses. One group consisted only of registered nurses employed within a critical care setting and the other group were registered nurses that were employed within areas other than the critical care setting. Both groups received the same research tool and lacked randomization in that the research participants from both groups were simply asked to participate in the survey. I used a nonprobability sample by convenience because this strategy allowed me to differentiate groups only according to department and to obtain a larger representation of the entire population.

The sample was drawn from all available registered nurses working within an acute care facility. The inclusion criteria for this study were that the participants must be registered nurses who provided direct patient care who work in CCU, ICU, NICU, cath

lab, interventional radiology, emergency, medical/surgical, medical oncology, pediatrics, telemetry, surgery, surgical testing and registration, same day surgery check in, or post anesthesia care. Excluded from this sample were any member of leadership, administration, hospice and home health, or any staff who did not participate in direct patient bedside care.

Power analysis. In considering the sample size required for RQ1, I conducted a power analysis using G-Power 3.1 (see Faul, Erdfelder, Lang, & Buchner, 2007), using test family entitled *t* tests and selecting linear multiple, fixed model, single regression coefficient. My selected input parameters were effect size 0.4, a power level of 0.8, and an alpha error of probability of 0.05 using a two-tailed outcome yielded a sample size of 22. Because of this very small sample size, I also used prior research into sample size analysis, and, according to Green (1991) a minimum sample size should be at least 104 + m where m equals the number of predictor variables. This required a sample size of 106. RQ2 consisted of the same predictor and outcome variables, but with two groups (ICU nurses and those nurses working in ICU). Therefore, the statistical analysis was the same, using a minimum of 104 + m for each group and I required a minimum sample size of 106 nurses per group.

Procedures for Recruitment, Participation, and Data Collection

Research participants were recruited from the hospital by two means. First, I placed flyers (see Appendix A) in each staff break room with my Walden University email address where they were able to input a link in a web browser to be directed to the study. A second method to recruit participants involved a notification using the same

flyer that was provided on my behalf via the facility's intranet with a direct link where staff clicked and were directed to the front page of the consent and questionnaire.

Once the research participant was directed to the survey site, the first page asked the individual to answer questions for inclusion in the study. There were three questions asked of each participant.

1. Are you a registered nurse?

2. Are you currently working within the acute care hospital facility?

3. Are you directly involved in patient care?

If the individual answered "no" to any question, a thank you screen appeared, thanking them for their interest and then closed. If the individual met the inclusion criteria the next screen contained the informed consent that the participant was required to read and acknowledge before continuing. Each participant was asked to complete a demographic data sheet (Appendix B) and required to answer the survey questions. Upon completing the survey, the research participant clicked to close the study, and a thank you statement was provided at the conclusion. As a small token of appreciation, each research participant received a free candy bar for completing the survey by taking one from the box provided in his or her respective break room. The survey was administered using Survey Monkey and the data were collected and downloaded into SPSS by Survey Monkey. The anonymous responses collector option was turned on prior to administering the survey, which restricted me from being able to store and trace any respondent information. Additionally, the survey did not ask for names of participants and there was no identifying information. There was no follow up survey or contact with

the research participants. Participants did not receive a debriefing at the conclusion of the study. Participants were allowed to exit the survey at any time and were thanked for their participation once the survey tool was closed.

Instrumentation and Operationalization of Constructs

I used three different research tools: one to assess job satisfaction, one to assess burnout, and a final tool to assess intent to leave. The first research tool intended to measure job satisfaction was the Job Satisfaction Survey (JSS). Created by Spector in 1994, this free downloadable survey consists of 36 questions designed to rate employee satisfaction based upon nine different components. Each component consists of four different questions (JSS, 2011; See Appendix C). The survey was specifically written for service organizations, such as nursing, and is also applicable to other organizations (JSS, 2011). The only requirement for using this study was that the results must be shared with the originator of the survey so that he may continue to compile data about the survey (JSS, 2011). Extensive internal consistency analysis has been conducted for this study for each of the nine components. Table 1 describes each of the components and a value (coefficient alpha) for all the internal consistencies is listed and a permission letter to use the survey is located in Appendix D.

Table 1

Internal Consistency of Reliabilities (Coefficient Alpha) Based on a Sample Size of 2,870

Scale	Alpha	Description
Pay	.75	Pay and remuneration
Promotion	.73	Promotion opportunities
Supervision	.82	Immediate supervisor
Fringe Benefits	.73	Monetary and nonmonetary fringe benefits
Contingent Rewards	.76	Appreciation, recognition, and rewards for good work
Operating Procedures	.62	Operating policies and procedures
Coworkers	.60	People you work with
Nature of Work	.78	Job tasks themselves
Communication	.71	Communication within the organization
Total	.91	Total of all facets

Note. From Job Satisfaction Survey, by P. Spector, 2011. Reprinted with permission

The second survey that was used is the Copenhagen Burnout Inventory (CBI; See Appendix E). This tool consists of three different subsections, each consisting of questions related to burnout. The first section relates to burnout at a personal level, the second relates to burnout in the work environment, and third section deals with burnout that is related to clients (Kristensen, Borritz, Villadsen, & Christensen, 2005). Similar to the JSS, the CBI has also been used to study the human services industries, including a population of nurses, and Kristensen et al. (2005) reported that this tool exhibited "high internal reliability" (p. 204), with Cronbach alpha's ranging from 0.85 to 0.87. The

scales can also be used interdependently. I used only the portion of this survey related to burnout in the work environment, which consisted of seven questions and used a five-point Likert scale. The CBI offered this tool as a courtesy for students and researchers and a similar offer of permission is in Appendix F.

The Anticipated Turnover Scale (ATS; See Appendix G) is designed to assess intent to leave among nursing professionals. The ATS is a 12-question survey and consists of Likert questions which are rated on a five-point scale (Hinshaw & Atwood, 1982). Each question has a range from strongly disagree (1) to strongly agree (5) for positively worded items and the opposite for negatively worded items. The total score for this scale (Appendix H) is simply attained by adding the sums of all of the questions by the number of questions in the survey (March, 2011). Permission to use this scale can be found in Appendix I. A meta-analysis of the reliability and validity that used results from 12 different reliability measure testing of this instrument was conducted by Barlow and Zangaro (2010) and the researchers determined that this survey tool provided an overall average reliability and construct validity score of 0.89 as a mean weighted effect size among registered nurses who work in the United States.

These three surveys were assimilated into one complete survey, which was used by each research participant. The total time to complete the survey was approximately 15–20 minutes. Once completed, the participant was directed to close the browser in order to log out of the application.

Data Analysis Plan.

The data were collected and stored in Excel and in SPSS for Macintosh. Each survey was screened for completeness and any incomplete survey was discarded. For RQ 1, the data that were generated are correlational and multiple linear regression analysis was used to determine to what degree the variables were linearly related (see Green & Salkind, 2014). For RQ2, the sample of completed surveys was analyzed using multiple linear regression in order to determine whether a relationship existed among the variables. The demographic data were presented in tables and descriptive and inferential statistical analysis provided a quantitative analysis of the relationships that exist among the participants.

Threats to Validity

External Validity Threats

Creswell (2009) described threats to external validity as those that occur when researchers make incorrect conclusions based upon the sample that has been selected. Incorrect inferences may be attributed to a narrow distribution of participants, research setting, or time related, which does not allow the researcher to incorporate results to populations that do not have similar characteristics to the research participants, settings, or time frame involved in the research study (Creswell, 2009). This research design applied to only one hospital setting and encompassed only registered nurses that participated in bedside care. The data that were generated from this study was not necessarily applicable to registered nurses working in other facilities, in other

communities or geographic locations, or who were not participating in the bedside care of the patient.

Internal Validity Threats

Threats to internal validity arise due to characteristics within the specific procedures, actions, or occurrences of the research participants that allow the researcher to draw incorrect conclusions from the research (Creswell, 2009). Creswell (2009) described in detail the many different threats to internal validity that can occur and these include history, maturation, regression, selection, mortality, diffusion of treatment, compensatory or resentful demoralization, compensatory rivalry, testing, and instrumentation. All these threats are addressed in greater detail.

History. History presents a threat to the internal validity of research due to the amount of time that occurs during the research process, which allows events to occur that might influence the research itself (Creswell, 2009). Research cannot take place in a vacuum, particularly as it relates to research involving human subjects. The time frame to conduct this research was over a fairly short time span of, at most, one month, and, as such, history did not play a significant role in influencing the validity of the construct.

Maturation. Creswell (2009) described maturation as a threat that influences the research participant in how they change over a period of time. Like the threat of history, maturation can be diminished by selecting a limited time frame to conduct the research thereby limiting the amount of change that can occur within the participant pool. However, recognizing that maturation can still occur, participants were randomly selected

in such a manner that a significant age distribution occurred within the participant population.

Regression. Regression within research refers to the selection of participants who have either very high or very low scores in order to skew the results (Creswell, 2009). Random selection of participants should help to create a mean scoring distribution. Additionally, particularly as it relates to this research, every effort was made to conduct the research during a time frame when participants would not be influenced, either positively or negatively, by functions that were going on within the facility where the research was being conducted

Selection Researchers that preferentially select research participants because they possess certain characteristics that may influence the research are guilty of violating this check on internal validity (Creswell, 2009). Within any human research population there will be participants that are more intelligent and possess certain characteristics that may predispose them to being a better participant. Within this research, selection was one of convenience and the process for selecting individuals was conducted in such a manner that did not allow for an unfair distribution of the participant pool.

Mortality. During research studies, participants may leave the research, change positions within an organization, or completely leave the facility altogether, affecting the results of the research. The threat of mortality in my study was that participants may not complete the surveys so those data would have to be deleted. The time frame for conducting this research helped to alleviate some of this error from occurring. An appropriate large sample size also helped to ensure that this threat was minimized.

Diffusion of treatment. Diffusion of treatment refers to the communication that exists between research participants and how this communication can influence participants' responses (Creswell, 2009). Within the selected research study communication certainly could have and probably did occur between research participants. However, registered nurses usually work within their own groups, so critical care nurses work with other critical care nurses and emergency department nurses only work with other nurses working in the emergency department. Therefore, within the individual groups, communication may have occurred, but this communication was likely seldom or nonexistent between different groups.

Compensatory or resentful demoralization. Compensatory or resentful demoralization occurs when one group feels like they are unequal to another group due to the treatment or intervention that they are receiving (Creswell, 2009). This threat to validity is certainly very important when considering a true experimental design. However, as this research was non experimental in its design and each group received the same survey, this particular threat did not apply.

Compensatory rivalry. Like compensatory or resentful demoralization, compensatory rivalry occurs when one group feels that they are not as important as another group because they are not receiving the same treatment (Creswell, 2009). This could have potentially occurred within the selected research design if the research tool had been directed to only one group of participants within the entire participant pool. However, within this research design, the research tool did not permit preferential treatment based upon the unit in which the participant works.

Testing. When participants become familiar with the research tool that is being used, they may already know what is being asked and will have a preformed answer in their minds, which will allow them to answer based upon the outcome of the test, thereby unduly influencing the outcome (Creswell, 2009). Within the selected research population there had been many different surveys that had been presented over a period of time. Certainly these surveys have had some affect in participant participation. However, the selected research tool had not been used on this population and resulted in no preconceived influence.

Instrumentation. Instrumentation involves controlling the pre-test and post-test design in such a manner to control the outcome. As there was no post-test, this should have had no influence on the internal validity of the research study. In fact, once the participant had completed the survey, there was no more contact or follow up in order to discuss the survey or to otherwise influence the decision of the participant.

Threats to Construct or Statistical Conclusion Validity. Construct validity threats occur when researchers use incorrect variable measures or inappropriate definitions of the variables (Creswell, 2009). In a similar manner, as suggested by Creswell (2009), statistical conclusion validity is threatened when the research that is conducted does not use an appropriate statistical analysis, or the researcher incorrectly applies or interprets the data that are generated based upon the statistical calculations. Selecting the appropriate statistical analyses and providing appropriate conclusions to justify the results of the research will alleviate these threats. Within the selected research design it was also important to understand that the confidence interval and effect size

were appropriate for this research, and required that a larger population should be drawn in order to ensure that the results were valid and representative of the mean population.

Ethical Procedures. The participants for this research were recruited through posted signs that were located in break rooms and via the home intranet page from where they work. There were no ethical concerns related to contacting participants. Research participants were asked questions related to job satisfaction surrounding their work environment, which could have produced feelings about where they work. In order to ensure that they were comfortable in participating in this survey, participants were provided with every protection to ensure that the data that were generated from this research was secured and protected and that their identities were also secured. I am employed at the participating site. In order to alleviate bias and threats of coercion, all research participants were assured of anonymity in that there was nothing from the results of the survey to identify the participant. Any concerns about ethical standards were satisfied before any research was conducted.

Prior to conducting any research at the clinical site, appropriate Review Board (IRB) applications and/or affiliation agreements were reviewed and approved by both the participating site and Walden University. As per the requirements of the participating site, initial IRB approval was obtained from Walden University prior to completing IRB approval from the research site and my IRB approval number is 03-26-19-0400910. Following is a brief description of the IRB requirements and permissions that are required for the research site.

Participating site. There was no official IRB at the participating site, but an affiliation agreement was required in order to conduct research and had to be approved by the site's research committee, which consisted of the director of research quality, as well as the CEO and CNO for the hospital. In order to conduct research at the facility, the principle investigator (PI) provided a clinical review form to the committee that not only provided information about the PI, but also included information regarding the proposed study, informed consent, and, if appropriate, HIPAA authorization, and a detailed cost-benefit analysis of the proposed research. The committee reviewed the documents and determined that the research was acceptable for inclusion by their facility.

Summary

This section has provided an overview of the methodology and research design for this study. Within the methodology there has been a discussion regarding the research population and the strategy that was used in order to sample this population. I used existing research and I conducted a power analysis in order to calculate the size of the research pool that was sampled in order to obtain accurate results. I have discussed the procedures that allowed me to recruit the population needed to conduct the research and I identified the research instruments that allowed me to survey the research population. I presented information as to how the data was analyzed and reported. Finally, I provided extensive documentation about how internal and external validity, as well as statistical and construct validity was assured and I presented information about ethical considerations and protections for how this research was conducted. Chapter 4 contains the results of the study.

Chapter 4: Results

Introduction

The purpose of this research was to determine if a relationship exists between burnout, job satisfaction, and intent to leave in nurses who work in the critical care unit within an acute care hospital in Western United States and to examine the relationship of job satisfaction and burnout between nurses who work in CCUs, as well as ICUs, and NICUs, compared to nurses who work in areas other than the critical care units, which included the emergency department, general nursing units, telemetry units, pediatric units, obstetrical units, and perioperative units (preoperative, intraoperative, and immediate postoperative).

There were two research questions:

RQ1: What is the relationship among burnout, job satisfaction, and intent to leave in nurses who work in the critical-care unit within an acute care hospital in the Western United States?

$H_0$1: There will be no relationship among burnout, job satisfaction, and intent to leave among nurses that work in the critical-care unit within an acute care hospital in Western United States.

H_a1: There will be a relationship among burnout, job satisfaction, and intent to leave among nurses that work in the critical-care unit within an acute care hospital in Western United States.

RQ2: What is the difference among job satisfaction, burnout and intent to leave between nurses who work in critical care compared to nurses who work in areas other than the critical care units?

$H_0$2: There will be no difference among job satisfaction, burnout, and intent to leave among those working in the critical care units and those who are working in other areas within the hospital.

H_a2: There will be a difference among job satisfaction, burnout, and intent to leave among those working in the critical care units and those who are working in other areas within the hospital.

This chapter provides information regarding the data collection process. My discussion section includes specifics about time frame, recruitment, and response rates to the research survey with baseline descriptive and demographic data of the research sample. I have also addressed the nature of the sample and any deviations from the original plan for implementation of the research study. I have included a comprehensive statistical analysis of the data, which are organized by each research question. Appropriate tables and figures are included as a means of summarizing the statistical analyses. Finally, a summary of the results is provided.

Data Collection

I collected data using the JSS, the CBI, and the ATS into one complete survey, which I uploaded to Survey Monkey. Additions were made to the research flyer to include a QR code so that participants could retrieve the survey by using the camera function associated with their i-phone or by downloading a QR code reader. The human

resources department at the participating facility was able to provide accurate numbers by department of every registered nurse eligible to participate in the survey and candy bars were purchased and divided into appropriate containers to distribute to each break room. After obtaining IRB approval for this addition, the research flyers were distributed to every appropriate department's break rooms and the survey was opened for participation. Data were collected over a 5-week time period. During the first 2 weeks there was a steady influx of participation, resulting in over 60 responses. However, after 2 weeks, responses began to trickle in much more slowly. An email was sent to supervisors of the individual departments, asking them to remind prospective participants of the flyer that was posted in the break room. The email was provided over three separate weeks as a means of attempting to increase participation and the survey was closed after 5 weeks.

Of the 565 nurses that were eligible for participation in the research study, 147 chose to participate in at least some part of the survey and 137 participants completed the survey in its entirety, representing a 26% participation rate among all participants and 93% completion rate among those who participated. The facility employs 92 nurses working in the critical care setting. Thirty-two critical care nurses elected to participate in the survey in some fashion, indicating a 34.7% participation rate with 28 completing the survey, indicating a 30.4% completion rate. The baseline descriptive and demographic characteristics of the research participants are listed in Table 2.

Table 2

Demographic Data for Participating RNs

Selected Demographic	Number of Responses	Percentage
Gender		
Male	24	17.52
Female	113	82.48
Ethnicity		
Caucasian	110	80.29
African American	0	0
Hispanic	9	6.57
Asian/Pacific Islander	14	10.22
Native American	0	0
Other	4	2.92
Age		
Less than 25	7	5.11
25 – 35	56	40.88
36 – 45	38	27.74
46 – 55	18	13.14
Over 6	1	0.73

(table continues)

Selected Demographc	Number of Responses	Percentage
Education		
Associates Degree	43	31.39
Bachelors Degree	80	58.39
Masters Degree	13	9.49
PhD	1	0.73
Years as a Nurse		
Less than 3	26	18.98
3 – 5 years	33	24.09
6 – 10 years	23	16.79
11 – 15 years	21	15.33
16 – 20 years	9	16.57
21 – 25 years	11	8.03
more than 25 years	14	10.22
Hours Worked per week		
10 – 20	2	1.46
20 – 30	19	13.87

(table continues)

Selected Demographic	Number of Responses	Percentage
30 – 40	106	77.37
over 40	10	7.30
Nursing as First Career		
Yes	82	59.85
No	55	40.15

The data presented in Table 1 provide a representative sample of the total population of registered nurses in the participating facility. A 2017 study conducted by the National Council of State Boards of Nursing (2019) found that men within the nursing profession increased from 7.5% in 2015 to 7.8% in 2017 and this is consistent with the selected research facility, given that this population of nurses is increasing. The same research also provides similar data for educational levels, ethnicities, and ages of registered nurses (National Council of State Boards of Nursing, 2019) and these data are all consistent with the selected population.

Results

Upon completion and closure of the survey, the results of the survey were downloaded and saved to an SPSS format. The data were scrubbed for any partial responses and all partial responses were discarded. The data were labeled according to the research question being asked and the individual responses to the questions were transposed according to whether the question was worded in a positive or negative fashion, as directed by the research tools. As the resultant data were compiled into one

completed download, consisting of both groups of participants (nursing working within the critical care environment and nurses not working in the critical care environment), the data were split into two different groups within SPSS in order to provide a separate analysis for each group. A multiple linear regression analysis of each group was performed using IBM SPSS Statistics version 25.

In order to assess the degrees of job satisfaction, burnout, and intent to leave, it was necessary to understand how to score the tools. Interpretation of the score for the JSS (2011) stated that the maximum score would be a 216, indicating an extremely high level of job satisfaction and the minimum score would be a 36, indicating an extremely low level of job satisfaction. Those who are dissatisfied would score between 36 and 108, those who are satisfied would score between 144 and 216 and those who are ambivalent would score between 108 and 144 (JSS, 2011).

Scoring for the CBI consisted of seven questions, each with five different Likert style responses. The scoring is based on each question with someone who answers "always" as 100, "often" as 75, "sometimes" as 50, "seldom" as 25, and "never" as 0. Each question is scored and then the final score for burnout is determined by the mean of the total scores. The original study, authored by Borritz and Kristensen (2004) by the National Institute of Occupational Health in Denmark, described a score of 50 or more indicated a high level of burnout.

Scoring for the final tool proved to be much more difficult to ascertain. Nowhere within the research or the original tool was there any mention of an absolute scoring system in order to identify what constitutes a low level of intent to leave versus a high

level. An email with the original authors informed me that a lower score represents a lower intent to leave and a higher score represents a higher intent to leave (J. Atwood, personal communication, July 12, 2019). However, the authors never determined an absolute value representing a high intent to leave. For the purposes of this study, the range for intent to leave is 1 for low, up to 7 for high intent. A score of 3.5 would therefore indicate a medium intent to leave.

Research Question 1

RQ1: What is the relationship among job satisfaction, burnout, and intent to leave among registered nurses working in the critical care unit only.

Descriptive statistical data with mean scores for intent to leave, job satisfaction, and burnout for registered nurses working in the critical care environment is provided in Table 3.

Table 3

Descriptive Statistics Data for RNs in Critical Care Setting

Descriptive Statistic	Mean	Standard Deviation	N
Intent To Leave total score	3.39	1.368	28
Job Satisfaction total score	141.61	21.252	28
Burnout average score	50.89	19.224	28

Using the descriptions for the scoring above, registered nurses working in critical care units are in the high ambivalent range for job satisfaction, indicating that they are neither satisfied nor dissatisfied with their job. The score of 50.89 for burnout indicates that

registered nurses working in the critical care setting experience a high level of burnout. Finally, a score of 3.39 on the intent to leave indicates that nurses working in the critical care unit experience a low to medium level of intent to leave.

In each analysis, the significance of these analyses required that certain assumptions were made regarding the populations that were being examined. The first assumption that was made regarding these populations is that the variables are normally distributed among the population and the second assumption was that the sample that is drawn from the population is a random sample and that the scores on the variables are independent of other scores on the same variables (Green & Salkind, 2014). A normally distributed variable is usually satisfied with a sample size that is of sufficient size and discuss that a sample size that is usually of 50 or more is considered to be sufficient (Green & Salkind, 2014). I used a free G*Power 3.1 calculator (Faul et al., 2007) to determine if my sample was of sufficient size. By selecting *F* tests, linear multiple regression, fixed model, R^2 deviation from zero, inputting an effect size of 0.4, a power of 0.8 and an alpha error of probability of 0.5, this calculated a minimum sample of 28, which was my exact sample size for registered nurses working in a critical care environment and well below my sample size of 109 for registered nurses not working in the critical care environment. Therefore, I could be reasonably certain that my sample sizes satisfied the assumptions associated with normality and variability of the population.

In order to determine statistical significance for job satisfaction, burnout, and intent to leave within the two individual groups, a multiple linear regression analysis was conducted for each group for the two predictor variables, job satisfaction and burnout as a function of the outcome variable, intent to leave. The resultant analysis for registered nurses working in critical care was significant and indicates that a relationship does exist between job satisfaction, burnout, and intent leave among this population, thereby satisfying research question one, $R2 = 0.845$, adjusted $R2 = 0.691$, $F(1,25) = 17.897$, $p = 0.000$, $f2=0.72$ (see Table 4).

Table 4

Model Summary for RNs Working in Critical Care

Model Summary[a]

Model	R	R square	Adjusted R square	Std. Error of the Estimate	R square Change	F Change	df1	df2	Sig. F Change
1	0.714[b]	0.509	0.491	0.977	0.509	27.000	1	26	0.000
2	0.845[c]	0.714	0.691	0.76	0.205	17.897	1	25	0.000

a. Which subspecialty within nursing best characterizes your current (full time) position? = CCU, ICU, NICU, PACU

b. Predictors: (Constant), average of burnout

c. Predictors: (Constant), average of burnout, Job satisfaction total score

Research Question 2

RQ2: What is the difference among job satisfaction, burnout, and intent to leave between nurses who work in critical care and nurses not working in the critical care environment.

Table 5 provides mean statistical data for each research tool for registered nurses not working in the critical care environment. The data indicates that registered nurses not working in the critical care environment were slightly more likely to leave their positions as compared to registered nurses working in the critical care environment (3.54, 3.39).

Table 5

Descriptive Data for RNs Not Working in Critical Care

	Mean	Std. Deviation	N
Intent to leave total score	3.54	1.467	103
Job satisfaction total score	141.81	21.880	103
average of burnout	52.91	21.594	103

Note: Which subspecialty within nursing best characterizes your current (full time) position? = Emergency, Pediatrics, Surgery, Medical/Surgical, Medical Oncology, Medical, Med -Telemetry, Telemetry, Cath Lab, or other

Additional linear regression tests were conducted in SPSS in order to satisfy the assumptions associated with linearity, homoscedasticity, multivariate normality, and multicollinearity. In order to test for nonlinearity, I conducted a scatterplot of the standardized predicted value with the standardized residual for the data using the predictor variables of job satisfaction and burnout and the outcome variable of intent to leave and included a Loess curve. The output is presented in Figure 2.

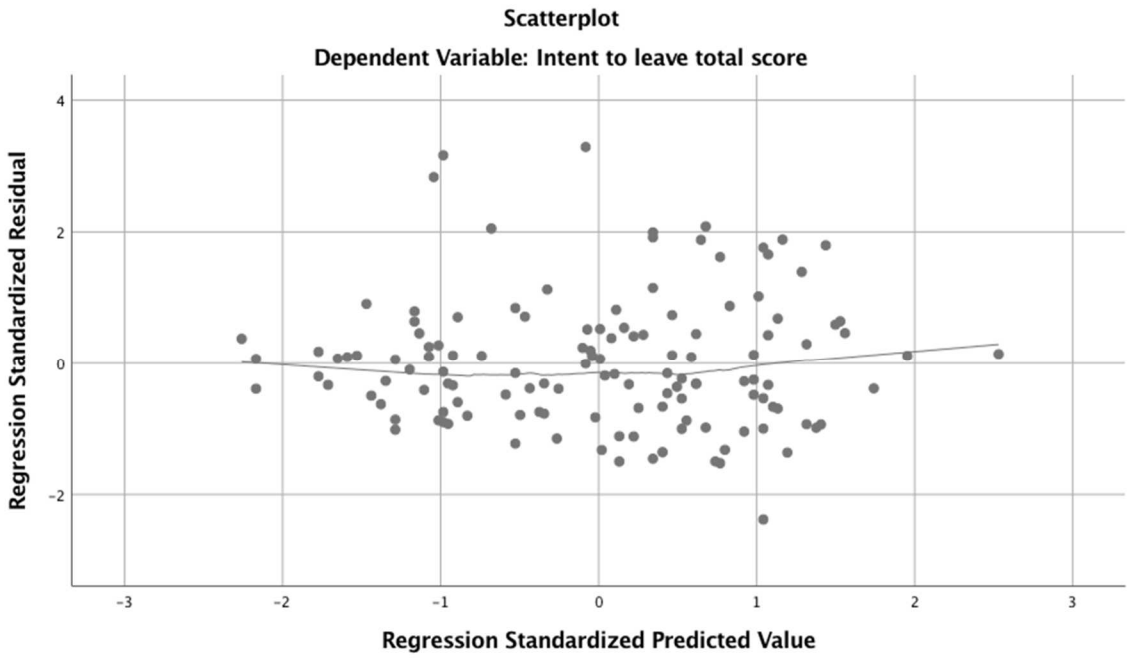

Figure 2: Scatter plot with Loess curve

The Loess curve presented in Figure 2 clearly shows that the relationship of standardized predicted to residuals is roughly linear and is centered around zero and this satisfies the assumption that the distribution of the data are linear in nature.

Homoscedasticity, also known as homogeneity of the variance, is an assumption of linear regression that assumes that the errors in the variance should be constant (UCLA institute for digital research & education website, 2019). In order to assess homoscedasticity of the data, I created a similar scatter plot as that presented in Figure 2, but without the Loess curve and this is presented in Figure 3.

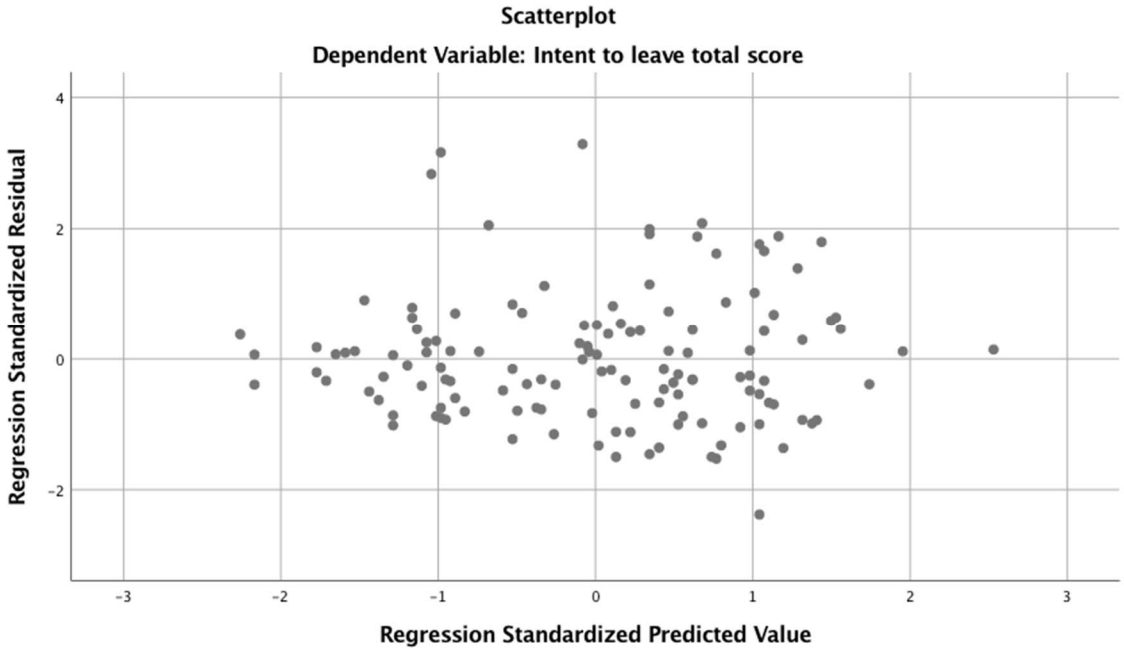

Figure 3: Scatter plot of residuals showing homogeneity of variance

In examining Figure 3, the data are scattered randomly around zero and are uniformly and randomly scattered, thus satisfying the assumption that the variance is random in error.

The assumption of normality, or multivariate normality as it relates to linear regression, can also be tested using SPSS. In order to verify this assumption, I constructed a normal probability plot. Because I was concerned about sensitivity to tail distributions and because I wished to compare the family of the distributions that vary on location and scale, I constructed Q-Q plot. A normal distribution should show points clustering around the horizontal line and this is clearly demonstrated for my data in Figure 4.

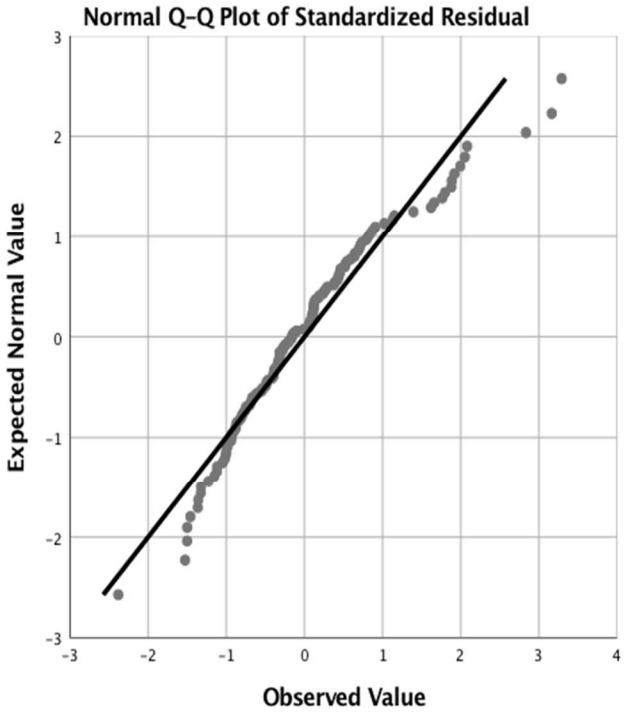

Figure 4: Q-Q plot

Finally, a test was conducted to show collinearity. Collinearity refers to the degree that two variables are linearly combined with each other (UCLA institute for digital research & education, 2019). When collinearity occurs, it results in wildly inflated values for the standard errors of the coefficients (UCLA institute for digital research & education, 2019). In order to test for collinearity, I conducted an additional test that calculates Variance Inflation Factor (VIF) values and tolerances and a simplified table depicting VIF and tolerances is provided in Table 6.

Table 6

Collinearity of Variables Test

Coefficients[a]

Model		Unstandardized Coefficients			Collinearity Statistics	
		B	Std. Error	Sig.	Tolerance	VIF
1	(Constant)	8.945	0.635	0.000		
	Job satisfaction total score	-0.029	0.005	0.000	0.71	1.408
	Burnout total score	-0.921	0.228	0.000	0.71	1.408

Note: a. Dependent variable intent to leave score

Note in Table 6 that the VIF values and standard error for each variable are very low, the tolerance scores are high (approaching 1.0), and that each independent variable is significant with the dependent (constant) variable. The high tolerance levels indicate that the information shared between the variables does not contain redundancy and the low VIF values, coupled with the standard errors are indicative of a lack of collinearity, while the overall test confirms significance, and therefore the collinearity test is shown to be negative.

The linear regression analysis for registered nurses not working in the critical care setting are similarly significant, indicating that a relationship also exists with job satisfaction, burnout, and intent to leave among this population of nurses. , $R^2 = 0.412$, adjusted $R^2 = 0.401$, $F(1,100) = 11.523$, $p < 0.001$, $f^2=0.12$ (see Table 7).

Table 7

Model Summary for RNs Not Working in Critical Care

Model Summary[a]

Model	R	R Square	Adjusted R Square	STD. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.587[b]	.345	.338	1.193	.345	53.135	1	101	.000
2	.642[c]	.412	.401	1.135	.068	11.523	1	100	.001

Note: a. Which subspecialty within nursing best characterizes your current (full time) position? = Emergency, Pediatrics, Surgery, Medical/Surgical, Medical Oncology, Medical, Med -Telemetry, Telemetry, Cath Lab, or other

b. Predictors: (Constant), average of burnout

c. Predictors: (Constant), average of burnout, Job satisfaction total score

By assessing the strength of the relationship associated with each group, the adjusted R^2 calculated in Table 4 shows a stronger linear relationship (0.691) than the group of registered nurses not working in the critical care environment, as shown in Table 7.

In order to determine if a statistically significant difference existed among registered nurses working in a critical care environment and registered nurses not working in a critical care environment, I conducted an Independent Samples *t*-test for the dependent and independent variables. The results of this test which indicated that there is no difference in the level of job satisfaction, $t(129) = -0.04$, $p = 0.966$, burnout, $t(129) = 1.74$, $p = 0.084$, and intent to leave, $t(129) = -0.46$, $p = .644$, among nurses working in the critical care environment as compared to nurses not working the critical care environment and therefore the null hypothesis was retained. The results of the Independent Samples *t*-test are summarized in Table 8.

Table 8

Independent Samples Test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2 tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Job Satisfaction Total Score	a	0.044	0.834	-0.04	129	0.966	-0.199	4.636	-9.37	8.973
	b			-0.04	43.8	0.965	-0.199	4.558	-9.386	8.989
Burnout Total Score	a	0.453	0.502	1.74	129	0.084	0.183	0.105	-0.025	0.391
	b			1.71	41.9	0.094	0.183	0.107	-0.032	0.399
Intent to leave total score	a	0.171	0.68	-0.46	129	0.644	-0.143	0.308	-0.753	0.467
	a			-0.48	45.3	0.632	-0.143	0.296	-0.739	0.454

Note: a. equal variances assumed
b. equal variances not assumed

Using the group statistics that were compiled from the Independent Samples test I calculated an effect size (Hedges' g) for each variable. I selected Hedges' g as an effect size due to the variability among the sample sizes (Statistics how to website, 2019). The effect sizes for each variable were low and are provided in Table 9.

Table 9

Group Statistics and Effect Size (Hedges' g)

	Which subspecialty within nursing best characterizes your current (full time) position?	N	Mean	Std. Deviation	Std. Error Mean	Hedges' g
Job Satisfaction Total Score	CCU, ICU, NICU, PACU	28	141.61	21.252	4.016	
	Emergency, Pediatrics, Surgical, Medical/Surgical, Medical Oncology, Medical, Med-Telemetry, Telemetry, Cath Lab, or other	103	141.81	21.88	21.156	0.0092
Burnout total score	CCU, ICU, NICU, PACU	28	1.57	0.504	0.095	
	Emergency, Pediatrics, Surgical, Medical/Surgical, Medical Oncology, Medical, Med-Telemetry, Telemetry, Cath Lab, or other	103	1.39	0.49	0.048	0.3651
Intent to leave total score	CCU, ICU, NICU, PACU	28	3.39	1.368	0.259	
	Emergency, Pediatrics, Surgical, Medical/Surgical, Medical Oncology, Medical, Med-Telemetry, Telemetry, Cath Lab, or other	103	3.54	1.467	0.145	0.1037

I compared two different groups, and additional tests were performed in order to analyze the demographics between the two groups. The demographics associated with gender, ethnicity, education, and nursing as a first career are categorical in nature and years as a nurse and age of the participant were reported as ordinal. Therefore, separate X^2 analysis tests were conducted on gender, ethnicity, education, and nursing as a first career and a Mann Whitney U test was conducted on years as a nurse and age of the participant as a function of subspecialty of nursing (grouping variable). The assumptions for both of these tests include that the sample must be random and of sufficiently large size. An additional assumption associated with the Mann-Whitney U test is that with the exception for median, the characteristics of the population distribution do not vary (Green & Salkind, 2014). According to data provided by the United States Census Bureau (2017) the percentage of men working in nursing is 9.1% and this value was used in calculating the X^2 analysis for gender. Data provided in a report by the Health Resources and Service Administration Bureau of Health Professions, National Center for Health Workforce

Analysis (HRSA) in 2013 indicated that 44.8% of the nursing population held either a diploma or Associate's degree, 44.6% held a bachelor's degree, 10.3% held a master's degree, and 0.4% of the nursing population held a PhD, and these values were used to calculate X^2 for level of education. The same report also listed information related to ethnicity and identified Caucasians as representing 75.3% of the workforce, Black/African American representing 9.9%, Hispanic/Latino representing 4.8%, Asian

representing 8.2%, American Indian/Alaskan Native representing 0.4%, Hawaiian/Pacific Islander representing 0.1%, and Multiple/Other as representing 1.3% of the population and these values were used to calculate X^2 for ethnicity. No data could be found regarding whether a nurse chose the nursing profession as their first career choice, so an assumption as to this number was made that 60% of those chose nursing as a first career choice. The Chi square analysis is provided in Table 10.

Table 10

Chi Square Analysis

	X^2 value	df	Asymp. Sig.
Gender	13.210	1	0.000
Ethnicity	2.656	3	0.448*
Degree Level	10.561	3	0.014
Career prior to Nursing	0.128	1	0.721*

Note: * No significance

Of the four demographics analyzed, there was a significant difference in gender, X^2 (1, N=131) = 13.210, $p < 0.01$, and degree level, X^2 (3, N=131) = 10.561, $p = 0.014$.

I calculated a Mann Whitney U test on the two demographic variables of age of participant and years as a registered nurse as a function of subspecialty of nursing (grouping variable). The resultant calculation (see Table 11) indicated that there was a significant difference in age ($p = .038$) and years as an RN ($p = .011$) .

Table 11

Mann Whitney U Test for Age and Years Employed as an RN

	How long have you been a registered nurse?	How old are you?
Mann-Whitney U	998.000	1092.000
Wilcoxon W	6354.000	6448.000
Z	-2.533	-2.074
Asymp. Sig. (2 - tailed)	0.011	0.038

Note: Grouping Variable: Which subspecialty within nursing best characterizes your current (full time) position?

I conducted Cronbach's Alpha on the questions from the JSS, CBI, and ATS survey individually in order to test for reliability. Within the realm of social sciences, a Cronbach's Alpha score of 0.7 or higher is considered to be acceptable (UCLA Institute for Digital Research & Education what does Cronbach's alpha mean website, 2019). The results of these scores are provided in Table 12.

Table 12

Reliability Statistics for the Survey

Research Tool Subset	Number of Questions	Chronbach's Alpha
JSS	36	0.895
CBI	7	0.926
Intent to Leave	12	0.917

Summary

I conducted a descriptive quantitative research study to better understand if job satisfaction, and burnout contribute to an increased intent to leave among nurses working in one acute care hospital within the Western United States. Registered nurses were combined into two groups, which included those who work in a critical care environment and those who do not. I used a research tool consisting of three distinct research tools. Results were compiled using SPSS version 25 and analyzed the data using a variety of different studies in order to determine 1) If there was a relationship among job satisfaction, burnout, and intent to leave with registered nurses working in the critical care environment and 2) if there was a difference among nurses working in a critical care environment and nurses not working in a critical care environment with respect to job satisfaction, burnout, and intent to leave. Demographic data were compiled and presented and descriptive and inferential statistical analyses were conducted including multiple linear regression, independent *t* tests, Chi square, and Mann-Whitney U tests. The null hypothesis was rejected, which meant that there was a relationship among job

satisfaction, burnout, and intent to leave among nurses working in the critical care environment. The null hypothesis was retained which indicated that no difference existed between nurses who work in critical care and nurses who do not work in critical care. I will present the interpretation of the findings, limitations of the study, and recommendations and implications for future research in Chapter 5.

Chapter 5

Introduction

I conducted a quantitative research study and the purpose of the research was to determine the relationship that exists between burnout, job satisfaction, and intent to leave in nurses who work in the critical care unit within an acute care hospital in Western United States and to examine the relationship of job satisfaction and burnout between nurses who work in CCUs, as well as ICUs and NICUs, compared to nurses who work in areas other than the CCUs, which included the emergency department, general nursing units, telemetry units, pediatric units, obstetrical units, and perioperative units (preoperative, intraoperative, and immediate postoperative)..The nature of the study consisted of two research questions. RQ1 was descriptive in nature and sought to examine whether a relationship existed among burnout, job satisfaction, and intent to leave among nurses who were working in the critical care unit. RQ2 was nonexperimental, descriptive, and correlational in nature and sought to determine whether a difference existed in job satisfaction, burnout, and intent to leave among nurses working in the critical care units, as compared to nurses not working within the critical care units.

Key Findings

The results of this research have provided many key findings associated with job satisfaction, burnout, and intent to leave among this population of registered nurses. Demographically, those who chose to participate in this survey were predominantly female (82.5%), Caucasian (80.3%), and were between the ages of 25 and 35 years of age

(40.9%). Over 58% of those who were surveyed had graduated from a college or university with a bachelor's degree. There was a diverse representation associated with years as a nurse with the largest contribution coming from those with between 3 and 5 years of experience (24.1%). Most of those who elected to participate in the survey worked in a full-time capacity (77.4%) and a majority (59.9%) had chosen nursing as a first career choice.

Of the 28 registered nurses working within the critical care unit, they were, on average, neither satisfied nor dissatisfied with their work environment (a score of 141.61), as determined by the JSS. Additionally, this group of nurses was at a high degree of burnout (50.89), as indicated by the CBI and were at a medium level at intent to leave (3.39), as indicated by the results of the ATS. A statistical analysis of the data indicated that a relationship does exist between job satisfaction, burnout, and intent to leave among nurses working in a critical care setting.

Of the 103 registered nurses who were not working in a critical care setting, the scores were very similar to those nurses who were working in the critical care setting on all the three measures of job satisfaction, burnout, and intent to leave. Nurses not working in the critical care setting indicated that they were neither satisfied nor dissatisfied with their jobs (141.81) as indicated by the JSS. This group of nurses showed a higher level of burnout (52.91) as compared to nurses not working in the critical care unit, and a higher level of intent to leave (3.54) as compared to nurses not working in the critical care environment. The results of these data support the idea that, regardless of the

unit in which registered nurses were working, burnout is high and may have more of an attributing factor in determining intent to leave than job satisfaction.

Interpretation of the Findings

There are many ways in which the results of this research can be interpreted. As compared to the existing literature that was described in Chapter 2, this research does provide some confirmation, as well as some alternative results to provide within the realm of contributing to the body of knowledge associated with the variables of job satisfaction, burnout, and intent to leave.

Similarities and Differences with the Existing Body of Knowledge

Job satisfaction, and burnout are statistically significant factors for intent to leave among nurses. Also, the rates of job satisfaction for both nurses working in critical care and not working in the critical care environment indicate that they are neither satisfied nor are they dissatisfied. My results are like those presented by Mooney et al. (2017) who showed that nurses working in the critical care environment had lower levels of job satisfaction, as presented as a degree of compassion satisfaction.

The results of my research indicated that nurses do experience a significantly high level of burnout and at least a medium level of intent to leave their current position. My results supported those of Breau and Rhaume (2014), who also found a lower intent to leave among nurses working in the critical care environment.

As previously described by Cortelyou-Ward et al. (2010) the work environment does have an effect on the degree of intent to leave among registered nurses. My results separated participants by work environment and may show that the work environment

itself had a positive correlation with intent to leave, which would support the research of Cortelyou-Ward et al. However, in comparison to their research, my study did not present results based upon degree level, marital status, or any other demographic.

Mooney et al. (2017) provided insight into the levels of burnout between registered nurses working in a critical care environment and nurses not working in the critical care environment. The results of my study appear to confirm that a high level of burnout does exist within the critical care environment. However, in comparison to the research conducted by Mooney et al., my study did not show that critical care nurses exhibited a higher level of burnout than those not working in a critical care environment. My research further supports the works of Cortelyou-Ward et al., (2010), Roche et al., (2016), and Shimp (2017) that job satisfaction and burnout can contribute to an increased intent to leave among nurses.

The results of my study confirmed the work of Erickson, Tomlin, and Swain (1990), which described many facets of the human condition, but, among those, was the idea of the human having basic needs and the satisfaction of those needs. As it relates to the nursing profession, a basic need of nurses is to have some level of job satisfaction within their work environment. Erickson (2018) theorized that when needs are unmet, this leads to stress, grief and loss. Similarly, my research shows that when a nurse's needs are not met (job satisfaction) then stress and grief can occur (burnout) which can lead to loss (intent to leave).

Limitations of the Study

There are numerous limitations to this research study. First, my research study was limited to only one participating facility located in only one geographical area. Therefore, the results of this research are not generalizable to nurses working in any other institutions or in any other geographical locations. There were also limitations associated with sample size. Although the power analysis that I conducted suggested that I needed a very small sample size of only 22 per group, the research conducted by Green (1991) indicated that I required a much larger sample size of 104 plus the number of predictor variables per group I was studying. As I studied only one group for RQ1, I needed 106 research subjects for this question, but only obtained 28. As for RQ2, the power analysis indicated I needed 106 participants per group for a total of 212 participants, but I only obtained 131 participants. Therefore, although I obtained a minimum number of participants for my research, my research was limited by the sample size.

A significant limitation that arose from this research was the sample itself that was drawn from the population. Of the demographics that I listed as part of my research, only gender, degree level, age, and years as a registered nurse were significant. The demographics associated with ethnicity and career prior to nursing were not significant demographic factors associated with this study and were therefore limitations of the study. In particular, the demographic associated ethnicity is likely of most concern. Of those who chose to participate in my study, the overwhelmingly predominant ethnic group was Caucasian (80.3%). Other ethnicities that chose to participate included Hispanic (6.6%) and Asian/Pacific Islander (10.2%). There was no participation from

those who attributed their heritage to African American or Native American descent, but there were four participants that chose the "other" category, representing nearly 4% of those who chose to participate. A more diverse ethnical population could potentially yield different results than those that were obtained from this research and, as such, this demographic was a limiting factor in my research. The demographic associated with career prior to nursing was not a significant factor.

An unforeseen limitation to this study related to the time frame in which the research tools were disseminated to the population. Porter, Whitcomb, and Weitzer (2004) describe survey fatigue as being exposed to too many surveys, which creates a lack of willingness to respond to future surveys. Approximately one month prior to the introduction of this research study to the participating facility, all the nurses within the facility had been asked to complete a lengthy questionnaire that would designate the facility as a "pathway to excellence" (PTE) organization. The ANCC recognizes a health care facility's commitment to providing a positive work environment that focuses on staff empowerment and getting staff involved (ANCC website, n.d.). This lengthy questionnaire that was distributed shortly before my research questionnaire may have created a degree of survey fatigue for participants and may have reduced the number of responses that I received.

An additional previously unrecognized limitation that arose as a result of this study was the use of the ATS. While analyzing the data, I attempted to reference my data to the existing literature associated with this tool and nowhere in the literature could I find a reference to the absolute value that was obtained with the scale and correlating this

value to an intent to leave. In conversing with one of the researchers that designed the scale, I found out they had never interpreted absolute values from their research and, as such, my research is certainly limited by the use of this tool and the validity of the interpretation is circumspect. Fortunately, the Cronbach's alpha scores for each of the tools show that the individual tools are reliable.

Finally, a limitation that arose as a result of this study was the calculated effect size statistics. I had calculated a sample size a priori using an effect size that I based upon previous literature and therefore chose a medium effect size. I reported an effect size (Cohen's f^2) based upon the linear regression analyses that I had conducted for nurses working in the critical care setting of 0.72 (high) and for nurses not working the critical care setting of 0.12 (low). In conducting the data analysis required for answering RQ2, I conducted an independent samples *t* test and from this calculation I was also able to calculate an effect size (Hedge's *g*) based upon each of the variables involved in the research (job satisfaction, burnout, and intent to leave) and the resultant effect sizes for each variables were low, resulting in a lower than optimal minimum calculated sample size a priori.

Recommendations

The research questionnaires that I used provided a reliable means of determining job satisfaction, burnout, and intent to leave among the population of nursing, albeit with some limitations. This study could easily be applied to other acute care facilities in other geographical locations. The results of these surveys could be compiled as a means of determining best and worst locations for job satisfaction, burnout, and intent to leave and

could be used as a starting point for participating facilities as a means of increasing job satisfaction and reducing burnout and intent to leave. Although this study focused on nursing within the acute care environment, burnout and intent to leave does not only affect nursing, the tool could easily be applied to other job functions within the acute care facility as a means of identifying which populations experience higher levels of burnout and intent to leave within the same facility.

I collected a large amount of demographical data that could be further analyzed to determine whether the predictor and outcome variables were significantly different associated with these variables. Additionally, the demographic of first career as nursing, although not significant in my study, could potentially lead to additional research opportunities associated with job satisfaction, burnout, and intent to leave among nursing professionals. As CCUs are more specialized than non CCUs, it would be reasonable to assume that the people who work within these units have a closer working relationship with each other than those not working in a CCU and, as such, may experience a lower level of intent to leave. Additional research must be conducted in order to determine why nurses are leaving the acute care environment. The results of my study offer additional insight into this phenomenon and may ultimately contribute to further research.

Implications

My study was certainly not exhaustive and had many limitations, and there is a significant potential for positive social change associated for the individuals that are working at the participating facility, for the facility in general, and for the population of patients for which this facility provides care. Research has been conducted that indicates

that the nursing population that was surveyed has a high level of burnout that is likely contributing to an increased intent to leave. This should provide an opportunity to open more discussions among leadership and staff as to what a more positive work environment may look like and how this would contribute to lower levels of burnout and ultimately lead to lower levels of intent to leave. By retaining this population of experienced nursing staff, the participating facility can also retain this population to provide care for the population of patients in the geographic area.

Conclusion

Nursing is a career in which there will always be a need for qualified individuals. There has been, and continues to be a significant shortfall of nursing professionals and, according to the American Association of Colleges of Nurses, this shortage will continue to become worse (American Association of Colleges of Nursing website, 2014). Unfortunately, many nurses currently working in the profession will leave their current position and many others will leave the profession altogether prior to retirement. Current research has shown that nurses working within an acute care setting within the Western United States, regardless of specialty, are experiencing high levels of burnout and are considering vacating their current position, or the profession entirely. This should be of concern for those considering the field of nursing, as well as those currently working at the bedside, caring for someone else's loved one. Most importantly, this should also be of great concern to everyone who may experience any event that may cause him or her to have to enter the hospital. Nursing is arguably the most important profession within the realm of healthcare and the profession must find a way to make the workplace more

desirable, jobs less stressful, and encourage fellow nursing professionals to want to remain in their current position. As long as nurses continue to leave the bedside, there will be a need for new nurses to replace them, but, more importantly, there will certainly be a need for nursing research to ask the important questions so that nurses may one day not have to leave the bedside. The lives of countless individuals may one day soon depend on it.

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Appendix A: Survey Flyer

SURVEY OPPORTUNITY VOLUNTEERS NEEDED

If you are a RN currently working at the bedside and are interested in participating in research. All RNs who work in a bedside nursing care unit within an acute care hospital facility are eligible to participate. The results of this study will be used to better understand how job satisfaction and burnout contribute to intent to leave among registered nurses. As a thank you for participation, those who complete their survey will be provided a free candy bar.

Please enter this link in your Internet web browser:

You will be directed to answer a few demographics questions and then answer questions related to the aforementioned topics

If you have any questions about the survey, please email

Appendix B: Demographics Data Sheet

Demographics Data Sheet

1. Are you currently a registered nurse working at . . and directly involved in bedside care?

1 (yes) 2 (no)

2. How long have you been a registered nurse?

1 (less than 3 years) 2 (3 – 5 years) 3 (5 – 10 years) 4(10 – 15 years) 5 (15 – 20 years) 6(20 -25 years) 7 (greater than 25 years)

3. What is the highest degree level that you have obtained?

1 (Associates degree) 2 (Bachelor's degree) 3(Master's Degree) 4(PhD)

4. How many hours per week do you work as a registered nurse in the acute care facility?

1 (10 – 20) 2(20 – 30) 3 (30 – 40)

5. Which subspecialty within nursing best characterizes your current (full time) position?

1 (CCU, ICU, NICU, PACU) 2 (Emergency, Pediatrics, Surgery, Medical/Surgical, Telemetry, Other bedside nursing unit not included)

6. How old are you?

1 (less than 25) 2 (25 – 35) 3 (36 – 45) 4 (46 – 55) 5 (56 - 65) 6 (over 65)

7. With which ethnicity do you most identify?

1 (Caucasian) 2 (African American) 3 (Hispanic) 4 (Asian/Pacific Islander) 5 (Native American) 6 (other not mentioned)

7. What is your gender?

1 (Male) 2 (Female)

8. Did you pursue any other career prior to entering the nursing profession?

1 (yes) 2 (no)

Appendix C: Job Satisfaction Survey

	JOB SATISFACTION SURVEY Copyright Paul E. Spector 1994, All rights reserved.	
	PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT.	Disagree very much 1 · Disagree moderately 2 · Disagree slightly 3 · Agree slightly 4 · Agree moderately 5 · Agree very much 6
1	I feel I am being paid a fair amount for the work I do.	1 2 3 4 5 6
2	There is really too little chance for promotion on my job.	1 2 3 4 5 6
3	My supervisor is quite competent in doing his/her job.	1 2 3 4 5 6
4	I am not satisfied with the benefits I receive.	1 2 3 4 5 6
5	When I do a good job, I receive the recognition for it that I should receive.	1 2 3 4 5 6
6	Many of our rules and procedures make doing a good job difficult.	1 2 3 4 5 6
7	I like the people I work with.	1 2 3 4 5 6
8	I sometimes feel my job is meaningless.	1 2 3 4 5 6
9	Communications seem good within this organization.	1 2 3 4 5 6
10	Raises are too few and far between.	1 2 3 4 5 6
11	Those who do well on the job stand a fair chance of being promoted.	1 2 3 4 5 6
12	My supervisor is unfair to me.	1 2 3 4 5 6
13	The benefits we receive are as good as most other organizations offer.	1 2 3 4 5 6
14	I do not feel that the work I do is appreciated.	1 2 3 4 5 6
15	My efforts to do a good job are seldom blocked by red tape.	1 2 3 4 5 6
16	I find I have to work harder at my job because of the incompetence of people I work with.	1 2 3 4 5 6
17	I like doing the things I do at work.	1 2 3 4 5 6
18	The goals of this organization are not clear to me.	1 2 3 4 5 6

	PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT. Copyright Paul E. Spector 1994, All rights reserved.	Disagree very much Disagree moderately Disagree slightly Agree slightly Agree moderately Agree very much
19	I feel unappreciated by the organization when I think about what they pay me.	1 2 3 4 5 6
20	People get ahead as fast here as they do in other places.	1 2 3 4 5 6
21	My supervisor shows too little interest in the feelings of subordinates.	1 2 3 4 5 6
22	The benefit package we have is equitable.	1 2 3 4 5 6
23	There are few rewards for those who work here.	1 2 3 4 5 6
24	I have too much to do at work.	1 2 3 4 5 6
25	I enjoy my coworkers.	1 2 3 4 5 6
26	I often feel that I do not know what is going on with the organization.	1 2 3 4 5 6
27	I feel a sense of pride in doing my job.	1 2 3 4 5 6
28	I feel satisfied with my chances for salary increases.	1 2 3 4 5 6
29	There are benefits we do not have which we should have.	1 2 3 4 5 6
30	I like my supervisor.	1 2 3 4 5 6
31	I have too much paperwork.	1 2 3 4 5 6
32	I don't feel my efforts are rewarded the way they should be.	1 2 3 4 5 6
33	I am satisfied with my chances for promotion.	1 2 3 4 5 6
34	There is too much bickering and fighting at work.	1 2 3 4 5 6
35	My job is enjoyable.	1 2 3 4 5 6
36	Work assignments are not fully explained.	1 2 3 4 5 6

Appendix D: Permission to Use Job Satisfaction Survey

Retrieved from http://shell.cas.usf.edu/~pspector/scales/share.html

Sharing of Results for Researchers Who Use My Scales

All of my scales are copyrighted. I allow free use under two conditions.

1. The use is for noncommercial educational or research purposes. This means no one is charging anyone a fee. If you are using any of my scales for consulting purposes, there is a fee.

2. You agree to share results with me. This is how I continue to update the norms and bibliography.

What Results Do I Need?

1. Means per subscale and total score

2. Sample size

3. Brief description of sample, e.g., 220 hospital nurses. I don't need to know the organization name if it is sensitive.

4. Name of country where collected, and if outside of the U.S., the language used. I am especially interested in nonAmerican samples.

5. Standard deviations per subscale and total score (optional)

6. Coefficient alpha per subscale and total score (optional)

I would love to see copies of research reports (thesis, dissertation, conference paper, journal article, etc.) in which you used the JSS. Summaries are fine for long documents (e.g., dissertation), and e-mailed documents are preferred (saves copy and mail costs). Be sure to indicate how you want the work cited in the bibliography.

Last modified January 7, 2011.

Appendix E: Copenhagen Burnout Inventory

Copenhagen Burnout Inventory

NB: The questions of the CBI should not be printed in the questionnaire in the same order as shown here. In fact, the questions could very well be mixed with questions on other topics. This is recommended in order to avoid stereotyped response patterns.

Part one: Personal burnout.

(First edition. February 2004)

Definition: Personal burnout is a state of prolonged physical and psychological exhaustion.

Questions:

1. How often do you feel tired?
2. How often are you physically exhausted?
3. How often are you emotionally exhausted?
4. How often do you think: "I can't take it anymore"?
5. How often do you feel worn out?
6. How often do you feel weak and susceptible to illness?

Response categories: Always, Often, Sometimes, Seldom, Never/almost never.

Scoring: Always: 100. Often: 75. Sometimes: 50. Seldom: 25. Never/almost never: 0. Total score on the scale
is the average of the scores on the items.

If less than three questions have been answered, the respondent is classified as non-responder.

Part two: Work burnout.

(First edition. February 2004)

Definition: Work burnout is a state of prolonged physical and psychological exhaustion, which is
perceived as related to the person's work.

Questions:

1. Is your work emotionally exhausting?
2. Do you feel burnt out because of your work?
3. Does your work frustrate you?
4. Do you feel worn out at the end of the working day?
5. Are you exhausted in the morning at the thought of another day at work?
6. Do you feel that every working hour is tiring for you?
7. Do you have enough energy for family and friends during leisure time?

Response categories:

Three first questions: To a very high degree, To a high degree, Somewhat, To a low degree, To a very low
degree.

Last four questions: Always, Often, Sometimes, Seldom, Never/almost never.

(Reversed score for last question).

Scoring as for the first scale. If less than four questions have been answered, the respondent is classified as
non-responder.

Part three: Client burnout.
(First edition. February 2004)
Definition: Client burnout is a state of prolonged physical and psychological exhaustion, which is
perceived as related to the person's work with clients*.
*Clients can be: patients, students, children, inmates, or other kinds of recipients.
1. Do you find it hard to work with clients?
2. Do you find it frustrating to work with clients?
3. Does it drain your energy to work with clients?
4. Do you feel that you give more than you get back when you work with clients?
5. Are you tired of working with clients?
6. Do you sometimes wonder how long you will be able to continue working with clients?
Response categories:
The four first questions: To a very high degree, To a high degree, Somewhat, To a low degree, To a very low
degree.
The two last questions: Always, Often, Sometimes, Seldom, Never/almost never.
Scoring as for the first two scales. If less than three questions have been answered, the respondent is classified
as non-responder.
NB: In these questions one should use the appropriate term for "clients" depending on the circumstances.
E.g., in a questionnaire for nurses, the term patients should be used, while the term children or students
should be used in a study of teachers' burnout.

Appendix F: Permission to Use Copenhagen Burnout Inventory

From: < >
Sent: Monday, January 29, 2018 3:45 AM
To: Randall Mcelreath
Cc:
Subject: VS: Angående CBI

Dear Randall McElreath,

Thanks a lot for your mail. You are hereby granted permission to use the Copenhagen Burnout Inventory on the condition that you clearly indicate that you are using the CBI and cite relevant references in this regard.

You can find the CBI-questionnaire if you follow this link: http://www.arbejdsmiljoforskning.dk/en/publikationer/spoergeskemaer/udbraendthed

You can read more about the CBI if you follow this

Scoring Key	Options	Item

link: http://www.arbejdsmiljoforskning.dk/da/publikationer/boeger%20og%20rapporter/boeger%20og%20rapporter?publicationId=489

And you are, of course, welcome to contact me again in case of questions.

Sincerely yours,

(-)	AS MA SA U SD MD DS	1. I plan to stay in my position awhile.
(+)	AS MA SA U SD MD DS	2. I am quite sure I will leave my position in the forseeable future.
(-)	AS MA SA U SD MD DS	3. Deciding to stay or leave my position is not a critical issue for me at this point in time.
(+)	AS MA SA U SD MD DS	4. I know whether or not I'll be leaving this agency within a short time.
(+)	AS MA SA U SD MD DS	5. If I got another job offer tomorrow, I would give it serious consideration.
(-)	AS MA SA U SD MD DS	6. I have no intentions of leaving my present position.
(+)	AS MA SA U SD MD DS	7. I've been in my position about as long as I want to.
(-)	AS MA SA U SD MD DS	8. I am certain I will be staying here awhile.
(-)	AS MA SA U SD MD DS	9. I don't have any specific idea how much longer I will stay.
(-)	AS MA SA U SD MD DS	10. I plan to hang on to this job awhile.
(+)	AS MA SA U SD MD DS	11. There are big doubts in my mind as to whether or not I will really stay in this agency.
(+)	AS MA SA U SD MD DS	12. I plan to leave this position shortly.

Appendix G: Anticipated Turnover Scale

Anticipated Turnover Among Nursing Staff

ANTICIPATED TURNOVER SCALE
by
(Hinshaw, A.S. and Atwood, J.R.)

Response Options

AS	=	Agree Strongly
MA	=	Moderately Agree
SA	=	Slightly Agree
U	=	Uncertain
SD	=	Slightly Disagree
MD	=	Moderately Disagree
DS	=	Disagree Strongly

Directions: For each item below, circle the appropriate response. Be sure to use the full range of responses (Agree Strongly to Disagree Strongly).

Appendix H: Instructions for Scoring Anticipated Turnover Scale

INSTRUCTIONS FOR SCORING SCALES AND SUBSCALES
SCALES WITHOUT SUBSCALES

1. GIVE EACH ITEM A SCORE.
   Use the + and - key provided. For each item, score it according to whether it is positive or negative. For example, on a 5-point scale, for + items, SA is scored 5 and SD is scored 1. Conversely, for a negative item on that same 5-point scale, an item response of SA is scored 1 and SD is scored 5.

2. COMPUTE THE SCORES.
   The score is the simple sum of all of the items in the scale divided by the number of items in the total scale.

Appendix I: Permission to Use The Anticipated Turnover Scale

Dear Researcher Mcelreath:

This is the second email mentioned in my first email.

Attached please find the Anticipated Turnover Scale as forwarded recently with its validity, reliability, etc. plus the theoretical model used in our Anticipated Turnover Study. The model is explicated in the Nursing Research article noted in the reference list. The model shows concepts we used successfully to predict anticipated turnover. The instruments include: Nursing Job Satisfaction, Work Satisfaction, Job Stress, Group Cohesion, Autonomy (quality of employment, job characteristics subscales) and Group Cohesion Scales. Some of these scales are ours and some by other authors.

This email constitutes the letter of permission to use the ATS.

All the best with your work.

Sincerely,