2023

The Investigation of Resilience as a Moderating Factor on Burnout and Intention to Stay in Nursing Professionals.

Florina Karasik
Walden University

Walden University

College of Management and Human Potential

This is to certify that the doctoral study by

Florina Karasik

has been found to be complete and satisfactory in all respects,

and that any and all revisions required by

the review committee have been made.

Review Committee

Dr. Kathleen Andrews, Committee Chairperson, Doctor of Business Administration Faculty

Dr. Edward Walker, Committee Member, Doctor of Business Administration Faculty

Chief Academic Officer and Provost

Sue Subocz, Ph.D.

Walden University

2023

Abstract

The Investigation of Resilience as a Moderating Factor on Burnout and Intention to Stay in Nursing Professionals.

by

Florina Karasik

MBA, Regis University, 2007

BS, Hunter College, 2001

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

September 2023

Abstract

The intention to stay in nursing staff working with adult patients in a hospital setting is a major concern for healthcare organizations because of its effect on patient health outcomes. Grounded in the social cognitive career theory, the purpose of this quantitative correlational study was to investigate resilience as a moderating factor in the relationship between burnout and intention to stay for licensed registered nurses with BSN degrees working with adults in a hospital setting. The participants were 80 licensed registered nurses with BSN degrees working with adults in a hospital setting in the United States of America. The results of the multiple linear regression were significant, $F(2,79) = 79.462$, $p < .001$, $R^2 = .665$. In the final model, resilience ($t = 12.503$, $p < .05$) was significant, while burnout was not significant. A key recommendation for nursing leaders is to develop resources for stress management in nursing staff. The implications for positive social change include the potential to enhance overall patient outcomes.

The Investigation of Resilience as a Moderating Factor on Burnout and Intention to Stay in Nursing Professionals.

by

Florina Karasik

MBA, Regis University, 2007

BS, Hunter College, 2001

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

September 2023

Dedication

I would like to dedicate this project and my DBA degree to all healthcare providers who have worked very hard to provide culturally competent patient care before, during, and after the COVID-19 pandemic. You are the true heroes. Stay resilient, positive, and always remember to take care of your mental and physical health to prevent burnout. To everyone who took time out of their lives to help others, continue to do so, and great things will happen to you. Never stop learning!

Acknowledgments

To my family who have always inspired me to achieve the highest level of success in academia. I would also like to thank my success on this long journey to my husband, Edward, and to my children, Alana and Mark, for giving me strength to reach for the stars and follow my dreams. Their continued love, household support, and inspiration were essential to the successful accomplishment of this long journey. I have to thank my parents for their love and support throughout my life. I also dedicate this study to my sister, Albina, for inspiring me to improve the healthcare delivery system through my academic and career successes.

The completion of this study could not have been possible without the expertise of Dr. Kate Andrews. I am grateful for all the guidance and support that she provided that allowed me to complete this DBA journey. Thank you for not letting me quit and encouraging me to push through. I would also like to thank Dr. Walker for taking the time to provide insightful feedback on my DBA study. Your feedback has helped me tremendously in my academic journey. I want to extend my gratitude to Dr. Bryan for all the positive feedback and recommendations on my research study. Without all of you, I would have never been able to achieve my goal of becoming a Doctor of Business Administration.

Table of Contents

List of Tables

List of Figures

Section 1: Foundation of the Study

Nursing professionals are exposed to stressful events directly related to their organization's policies and procedures and through the nature of their work (Sklar et al., 2021). Nurses who suffer from burnout are physically, mentally, and emotionally exhausted. The strain of caring for patients with poor outcomes and long work hours may contribute to burnout (Kelly et al., 2021; Sullivan et al., 2022). A variety of factors contribute to nursing stress, including the nationwide nursing shortage, the growing number of elderly Americans afflicted with chronic diseases, and the COVID-19 pandemic (Chen et al., 2021; Galanis et al., 2021). An increase in the intent to leave healthcare organizations has been linked to burnout among nursing professionals (Chang et al., 2019). The purpose of resilience is to build the strength and strategies necessary to cope with stressful situations before they occur (Setiawati et al., 2021). The concept of resilience enables nursing professionals to mitigate the effects of burnout, and individuals who exhibit resilience have a number of attitudes, coping strategies, and behaviors that help reduce the negative effects of stress (Setiawati et al., 2021; Schuller et al., 2020).

Background of the Problem

In response to the COVID-19 pandemic, nursing professionals, physicians, and first responders experienced more increased stress and burn out after the pandemic than before the pandemic (Rivas et al., 2021; Sklar et al., 2021). Healthcare provider burnout has been a challenge for nurses since before the COVID-19 pandemic; during the pandemic, however, there was a greater degree of nurse burnout reported. Statistics show

that the burnout among healthcare providers increased from 23% to 35.1% due to the increased workload associated with COVID-19 pandemic (Kelly et al., 2021; Sullivan et al., 2022), showing that while nurses are traditionally vulnerable to burnout, a pandemic increases that risk (Sullivan et al., 2022).

In the United States, approximately 3.3 million registered nurses (RN) are employed, of which 1.3 million work in hospitals (Liu et al., 2021). The majority of nurses who report burnout intend to change careers within 12 months, resulting in a shortage of qualified nurses (Yu et al., 2021). Changes due to the pandemic in meeting the needs for an increased number of patients and the type of healthcare provided in various healthcare facilities have contributed to burnout and turnover intentions in healthcare providers who work in a hospital setting (Rivas et al., 2021; Mantri et al., 2021; Sklar et al., 2021). Burnout is a phenomenon in an occupational context that concerns the wellbeing of a nursing professional who experiences prolonged stress (Willard-Grace et al., 2019). Job-related burnout significantly impacts patient care, patient safety, and the overall well-being of healthcare providers (Feder et al., 2021; Guo et al., 2019). Nurses' resilience to burnout and stress may be a significant factor in their decision to remain in the nursing (Gensimore et al., 2020).

Problem and Purpose

Healthcare organizations must identify and address factors contributing to high burnout to decrease costs associated with high turnover rates (De Hert, 2020; Di Trani et al., 2021). The specific business problem is that some nursing leaders lack the

understanding of resilience as a moderating factor in the relationship between burnout and the intention to stay for licensed registered nurses with Bachelor of Science in Nursing (BSN) degrees working with adults in a hospital setting. The purpose of this quantitative correlational study is to investigate resilience as a moderating factor in the relationship between burnout and intention to stay for licensed registered nurses with BSN degrees working with adults in a hospital setting.

Population and Sampling

The selected population for this study consists of licensed registered nurses with BSN degrees working with adults in a hospital setting in the United States of America. A sampling procedure involves selecting a statistically significant sample of individuals from a statistical population to study the characteristics of that population as a whole. Research objectiveness can be assured by choosing the appropriate sampling method (Moser & Korstjens, 2018). Identifying the population of interest begins by defining the research question and goal. I plan to conduct a correlational study to determine the resilience as a moderator on burnout and the intent to stay of licensed registered nurses with BSN degrees working with adults in a hospital setting.

A nonprobabilistic, convenience sampling procedure is appropriate for this quantitative correlational study. This nonprobability, convenience sampling method ensures participants represent the population, which is crucial to obtaining valid and reliable results (Andrade, 2021). G*Power software 3.1.9.3 was used to conduct a power analysis to determine sample size. A multiple linear regression fixed model computation

with an R2 deviation from 0, a medium effect size of 0.15, a Type I error rate $\alpha = 0.05$, and power (1- β) set to 0.80 showed a minimum required sample size of 77 participants. The nonprobabilistic, convenience sampling method ensures that participants are representative of the population, which is important in obtaining results relevant to the research context (Andrade, 2021). Participants will be recruited using LinkedIn, Facebook, and the CentraState Medical Center. An online advertisement will be used to recruit participants through social networks. The online advertisement will have a link to information about the study, eligibility screening, and a survey. Only licensed registered nurses with BSN degrees working with adults in a hospital setting will be eligible to participate in this study. Prior to interacting with participants, I obtained approval from Walden University's Institutional Review Board (IRB).

Nature of the Study

I chose a quantitative methodology for my study as quantitative research methodology establishes relationships between variables (Ratelle et al., 2019). The quantitative methodology is appropriate for this study as I will test hypotheses using close-ended questions. Quantitative research methodology establishes interaction between variables (Ratelle et al., 2019). In contrast, a qualitative design would not be appropriate for this study because the data collected would be highly subjective and data rigidity and validity would be more difficult to assess. Qualitative researchers use open-ended questions to discover what is occurring or has occurred (Cristancho et al., 2018). Therefore, I will not use qualitative methodology because the data needs to be objective

to determine a relationship, and I will not be using open-ended questions for in-depth gathering of data. Mixed method research includes qualitative and quantitative elements (Andrade, 2021). To explore the correlation between resilience, burnout, and intent to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting, I will not be discovering what has occurred, which is part of a qualitative portion of a mixed study. Therefore, a mixed methodology is not appropriate for this research project.

This study will use a correlational design to study a moderating variable, and a predictor variable to observe the variables and their relationship to the dependent variable. Correlational design research is used to discover if two or more variables are associated in any way using statistical analysis (Curtis et al., 2016). The causal-comparative study design examines the numerical relationship between independent and dependent variables at a given point in time in a defined population (Brewer & Kubn, 2010). A causal-comparative design would not be appropriate for this study because that type of design is used to discover the cause-and-effect relationship between independent and dependent variables. A quasi-experimental study includes manipulation of independent variables (Maciejewski, 2020). I am not manipulating variables, so a quasi-experimental design is not appropriate for this study. Experimental research takes place in a controlled environment (Miller et al., 2020); therefore, an experimental design is not appropriate because I am not gathering data in a controlled environment.

Research Question

To what extent does resilience moderate the relationship between burnout and intent to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting?

Hypotheses

H0: Resilience does not moderate the relationship between burnout and intent to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting.

Ha: Resilience moderates the relationship between burnout and intent to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting.

Theoretical Framework

This study will be guided by the social cognitive career theory (SCCT) as the theoretical framework. This framework will be used to explore and understand its role in the employee cognitive processes and behaviors that led to burnout and intent to leave an organization. The SCCT was created by Lent et al. in 1994 and was built on the foundations of Bandura's social cognitive theory, which is comprised of factors that influence behavior (Lent & Brown, 2019). The factors that influence behavior according to Lent et al. (1994) and Bandura (1986) are goals, outcome expectations, self-efficacy, and social structural factors. Based on the SCCT framework developed by Lent et al. (1994), interest is a function of self-efficacy and outcome expectations. An individual's self-efficacy and outcome expectations change as their learning experiences change, and

career development is viewed through the lens of a developmental perspective (Lent et al., 1994). According to the theory, the selection of goals is dynamic, and environmental factors affect the choice of goals.

These factors are then subdivided into workplace behaviors including occupational interest, employee choice in career, performance, and an employee's persistence in accomplishing work-related tasks (Lent et al., 1994). This SCCT was modified to recognize the importance of self-efficacy and cognitive applications of human behavior (Bandura, 1986; Lent et al., 1994). In addition, the SCCT also considers different tasks and challenges that emerge throughout an employee's career life cycle (Lent et al., 2019). Bandura (1986) created the social cognitive theory, which links the variables of self-efficacy beliefs, outcome expectations, and goals, and that serves as the foundation for the SCCT.

The SCCT that will guide this study states that individuals strive to succeed by fulfilling self-efficacy and outcome expectation, especially when the goals are clear, specific, and supported by others (Lent et al., 1994). Therefore, performance attainment assessed through various tools and instruments can provide valuable feedback on whether an employee has a solid or weak self-efficacy and resilience, along with outcome expectations that organizational leaders can use to help an employee revise or confirm choices and prevent turnover in the organization (Lent et al., 1994). Chang et al. (2019) stated that through further investigation of the SCCT, changes in employee behavior and

development towards fulfilling self-efficacy could be analyzed and used to predict an employee's intention to leave in organizations in various industries.

The SCCT will be used as a foundation to investigate resilience as a moderator of the relationship between burnout and intention to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting. A comprehensive explanation of career decisions is provided by the SCCT (Lent et al., 1994). Scholars may be able to analyze nurse burnout in a nursing context and suggest pathways to monitor it by applying the SCCT specifically within a nursing context. This usefulness motivated me to develop this study by incorporating the SCCT and its key components, including self-efficacy, outcome expectations, and career interest. Intentions to leave a profession or organization are driven first by interest in a career. Outcome expectations and self-efficacy as mediating factors, burnout affects the career interest construct of the SCCT indirectly.

Using SCCT, I will describe how burnout motivates established, practicing nurses to review their careers and determine if they intend to leave the profession. As a result of SCCT, the organization will be provided with novel insights regarding nurses' intentions to remain or leave the organization due to burnout. According to SCCT, individuals evaluate their self-efficacy and outcome expectations during the career search process, which is subsequently linked to their desire to pursue a specific career (Lent et al., 1994). This study seeks to explain the relationship between burnout and intent to leave or remain in nursing by applying SCCT to model career decisions among practicing nurses. The

SCCT states that self-efficacy reflects an individual's level of confidence in his or her ability to perform a particular task, respond to burnout, and maintain a sense of resilience (Lent & Brown, 2019; Lent et al., 1994). The SCCT's self-efficacy and outcome expectations will serve as underlying factors for the analysis of professional commitment of employees in an organization concerning burnout and intent to leave. The SCCT also explains the personal goals contribute to resilience and individual burnout levels in licensed registered nurses with BSN degrees working with adults in a hospital setting.

Operational Definitions

Burnout: Burnout is a state of emotional, mental, and physical exhaustion caused by repeated and prolonged stress (Lacy & Chan, 2018).

Depersonalization: Depersonalization is the experience of feeling distant from one's own behavior, thoughts, and emotions (Miguel-Puga et al., 2021).

Resilience: Resilience is an individual's ability to cope with and adapt to stress-causing conditions (Setiawati et al., 2021).

Assumptions, Limitations, and Delimitations

Assumptions

The concept of assumption refers to unproven, factually based beliefs that are accepted by the researcher as real and are considered essential to any research (Leedy et al., 2019). Based on this definition, several assumptions exist in this study. Frey (2018) said participants should complete the surveys truthfully and transparently as part of proper data collection process. I assume participants will answer the questions honestly

because I will work to establish and maintain trust. Participants will be assumed to answer the questions as honestly as possible as their trust and comfort will be maintained. A second assumption is all participants are direct patient health care providers. Those who say they do not provide direct patient healthcare will be excluded from this study. According to Lash et al. (2021), the data collection and analysis process should be well-controlled regarding researcher bias. By collecting data while offering equal participation opportunities, and by analyzing the data with statistical software, I will work to mitigate bias in data analysis.

Limitations

In the context of research, limitations refer to issues with the conduct of a study that contribute evidence to research findings but are beyond the researcher's control (Munthe-Kaas et al., 2019). It is possible certain conditions associated with this study may limit the outcome of this study. First, a key limitation will be the use of self-reported data. Data will reflect the direct patient healthcare provider perception of resilience, burnout, and intent to stay, which may be distorted or incomplete. Some direct patient healthcare providers may not understand the subject properly. A second limitation is time constraints on the part of healthcare workers. Due to high patient volume, direct patient healthcare providers may have limited time to provide the necessary survey data. The third limitation is the total length of the three survey instruments used for data collection. The providers may leave some items on the surveys blank or may not have enough time to complete all the surveys.

Delimitations

Delimitation of the study is defined as boundaries that the researcher sets for the study (Coker, 2022). The scope of this study included only licensed registered nurses with BSN degrees working with adults in a hospital setting using online surveys. For this study, I will exclude other patient care providers, administrative staff, and organizational leaders because they do not provide direct patient care in the same capacity as licensed registered nurses with BSN degrees working with adults in a hospital setting. As a result, their experiences will fall outside this study's scope.

Significance of the Study

Organizational leaders in healthcare facilities are responsible for maximizing profits by delivering high-quality patient care through direct healthcare providers. The study findings will provide insights into the relationship between resilience, burnout rates, and intent to remain employed as direct healthcare providers among licensed registered nurses with BSN degrees working with adults in a hospital setting. Significant interventions to predict resilience, burnout, and intent to stay will aid organizational leaders in preventing burnout among direct healthcare providers. This could lead to continued delivery of high-quality patient care and an increase in the profitability of the healthcare facility.

This study is significant in that a healthcare organization that promotes resilience in licensed registered nurses with BSN degrees working in a hospital setting may be able to improve the overall patient experience, thereby improving patient health outcomes and

decreasing mortality rates. There is a possibility that licensed registered nurses with BSN degrees working with adults in a hospital setting could experience improved personal relationships because decreased burnout may result in less stress overall. This study will also close gaps in knowledge on resilience as a moderator on the relationship between burnout and intent to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting. The results of this study can be used to promote resilience and decrease factors contributing to burnout in nursing professionals to improve the providers' personal relationships and prevent staff shortages, which will contribute to improving the overall delivery of patient care, improve patient outcomes, and decrease healthcare disparities in diverse patient populations.

A Review of the Professional and Academic Literature

This quantitative correlational study investigates resilience as a moderating factor in the relationship between burnout and intention to stay among licensed registered nurses who hold BSN degrees and work with adults in hospital settings. It is my intention to provide background information relevant to the business problem, the moderating, predictive, and dependent variables, and the theoretical framework in the following literature review. Burnout, depersonalization, self-efficacy, emotional exhaustion, resilience, and contrasting theories are all discussed in the literature review. Among the electronic databases used by Walden University Library were ProQuest Central and ProQuest Dissertations & Theses Global. In addition, I examined peer-reviewed journal articles, books, and dissertations using Google Scholar Academic Search Complete and

PubMed. The following keywords were used to search for literature: *nursing, burnout, self-efficacy, depersonalization, resilience, intent to stay, COVID-19, medical errors, Social Cognitive Career Theory,* and *emotional exhaustion*. A total of 273 articles were found by using these keywords separately and in combination with each other. One hundred seventy-five references were cited, including 162 (88.0%) peer-reviewed publications published within the last 5 years and twenty-two peer-reviewed publications published over 5 years ago.

Social Cognitive Career Theory

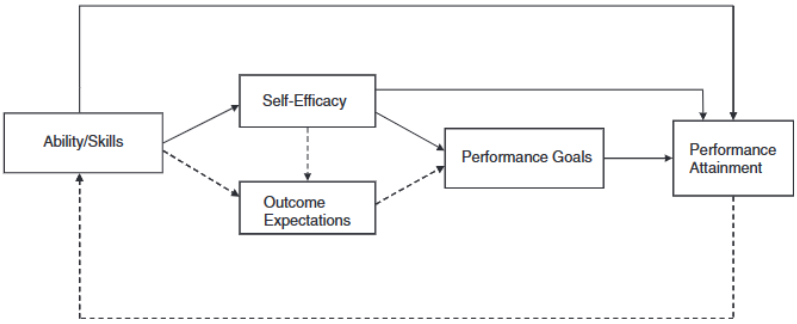
This theory was based on Albert Bandura's social cognitive theory (Bandura, 1976; Lent & Brown, 2019; Mohd Rasdi & Ahrari, 2020). In social cognitive career theory, certain factors such as individual physical characteristics, environmental factors, and specific learning opportunities influence the decisions related to a particular career (Lent et al., 1994). The social cognitive career theory posits that beliefs regarding self-efficacy and outcome expectations are strong predictors of career behaviors such as burnout and intention to stay (Lent et al., 1994). The SCCT also explains the personal goals contribute to resilience and individual's burnout levels in licensed registered nurses with BSN degrees working with adults in a hospital setting (Lent & Brown, 2019; Lent et al., 1994). The SCCT will be used to guide this study in assessing employees' resilience and burnout levels.

Lent et al. (1994) proposed the SCCT model to explain how academic and career interests develop, how career choices are made, and how career success is obtained (Lent

& Brown, 2019; Mohd Rasdi & Ahrari, 2020). This theory was developed by Lent et al. in 1994 and was based on Albert Bandura's social cognitive theory (Lent et al., 1994; Lent & Brown, 2019; Mohd Rasdi & Ahrari, 2020). The foundation of the SCCT consists of self-efficacy beliefs, outcome expectations, and personal goals, where self-efficacy beliefs and individual's belief about performing particular behaviors, outcome expectations are the outcomes of performing particular organizational behaviors, and personal goals are individual's intentions to perform a particular activity and reach a certain level of performance (Lent & Brown, 2019; Lent et al., 1994; See Figure 1). Social cognitive career theory (SCCT) can be seen as a career model aligned to personal input, interests and hobbies, career goals, and actions (Mohd Rasdi & Ahrari, 2020). Additionally, Lent and Brown (2019) explained that SSCT was created to assist with understanding the characteristics of employees and how their socioeconomic location affected their experiences and performance.

Figure 1

Social Cognitive Model of Work Performance



The social cognitive model of work performance shows paths between ability, self-efficacy, performance goals, and work performance (see Figure 1). Career interest or performance attainment, a part of SCCT, was negatively related to professional turnover intentions in the past study by Pham et al. (2019). Incorporated within the SCCT are various contributing factors that influence employees' self-efficacy, professional goals, and overall success in the organization connected to intent to leave (Lent et al., 1994; Lent & Brown, 2019). Another concept within the SCCT related to burnout and turnover is an employee's innate desire to belong and be a part of society (Nifadkar & Bauer, 2015). Organizational leaders who understand human behavior meet particular needs of employees and promote positive organizational culture through employee engagement and motivation (Duckworth & Gross, 2020; Tatum, 2018; Zhang et al., 2019). The outcome expectations set by leaders in the organization include activities in which employees will engage, and the effort of the employee is all a part of career interest and contribute to the self-efficacy of the employee, which promotes attractive work conditions (Liu et al., 2020). Employees are thinkers, and they compose their thoughts about the future course of action. They are also self-reactors with the ability to motivate and regulate their activities, such as intent to leave (Bandura, 1977).

According to SCCT, employees' engagement in work-related tasks, the determination and tenacity they put into them, and the eventual success are somewhat determined by their self-efficacy beliefs and outcome expectations (Makara-Studzińska et al., 2019). Employees' personal goals include intentions to engage in a particular task and

achieve a specific level of performance (Makara-Studzińska et al., 2019; Zhang et al., 2019). These two work-related goals that individuals strive to achieve in the workplace are choice and performance goals, according to the SCCT (Lent & Brown, 2019; Lent et al., 1994; Liu et al., 2020). When organizational leaders set goals for employees consistent with employees' personal capabilities and the outcomes that employees can obtain by pursuing or following a particular course of action, there is less chance of an employee experiencing burnout (Liu et al., 2020, Zhang et al., 2019). The more power individuals feel towards their work performance, the more confident they will be in their ability to complete the required work tasks, make decisions effectively, and the less likely they will leave the workplace. Part of the SCCT is an individual's ability to overcome obstacles that might prevent them from accomplishing career goals, potentially leading to burnout (Lent et al., 1994; Lent & Brown, 2019; Zhang et al., 2019). Employees' interest and development in their field and overall job satisfaction are evaluated using SCCT.

The SCCT that guided this study states that individuals strive to succeed by fulfilling self-efficacy and outcome expectations, especially when the goals are clear, specific, and supported by others (Lent et al., 1994). Therefore, performance attainment assessed through various tools and instruments can provide valuable feedback on whether an employee has solid or weak self-efficacy and outcome expectations, which organizational leaders can use to help an employee revise or confirm choices and prevent turnover in the organization (Lent et al., 1994; Lent & Brown, 2019; Liu et al., 2020). Through further investigation of the SCCT, changes in employee behavior and

development toward fulfilling self-efficacy can be analyzed and used to predict the intention to leave in employees, organizations, and various industries (Chang et al., 2019; Zhang et al., 2019). The core principles of SCCT are self-efficacy and outcome expectations, which serve as underlying factors for the analysis of professional commitment of employees in an organization concerning burnout and intent to leave and contribute to the turnover rate.

The SCCT can be used to design and test interventions to prevent burnout and reduce turnover rates in any organization by assisting organizational leaders in assessing employees' self-efficacy, performance satisfaction, and goal attainment (Liu et al., 2020). The logical connections between the framework presented and the nature of my study show this framework can be used to explore and understand resilience's role in the employee's cognitive processes and behaviors, which lead to being a moderator between burnout and intentions to stay of licensed registered nurses with BSN degrees working with adults in a hospital setting. The SCCT is a model created by Lent in 1994 to explain factors that can impact the individual's decision to stay in an organization. The SCCT allows the direct patient health care provider to analyze their work experience and increase resilience (Lent & Brown, 2019).

Di Trani et al. (2021) suggested that nursing professionals' resilience levels moderately affect burnout and intent to leave the workplace. Burnout manifests in various forms, including depersonalization, emotional exhaustion, and low self-efficacy (Sullivan et al., 2022). There is an urgent need to understand the connection between burnout and

medical errors and how this influences the intention of nursing professionals to remain in the profession (Phillips et al., 2022).

Contrasting Theories

The Job Demands-Resources (JD-R) Model was developed in 2006 by Bakker and Demerouti (Bakker & De Vries, 2021) and was intended to provide an alternative to existing employee well-being models. According to the model, working conditions are divided into job demands and job resources (Baker & De Vries, 2021; Udushirinwa et al., 2022). The job demands are the physical or emotional stressors associated with a position (Baker & De Vries, 2021; Patel & Bartholomew, 2021). Time pressures, heavy workloads, a stressful working environment, role uncertainty, emotional labor, and poor relationships are some of the factors that contribute to these issues (Baker & De Vries, 2021; Patel & Bartholomew, 2021; Udushirinwa et al., 2022). Efforts to achieve goals and reduce stress may be facilitated by physical, social, or organizational resources, also known as job positives (Baker & De Vries, 2021; Patel & Bartholomew, 2021). The characteristics include autonomy, strong work relationships, opportunities for advancement, coaching and mentoring, and the ability to learn and grow (Baker & De Vries, 2021). During times of high job demands and low job positives, the JD-R Model suggests that an employee experiences stress and burnout. As a result, good job positives can offset the negative effects of high work demands and promote motivation and engagement in the workplace. There is a gap in this theory that fails to consider individuals' resilience and the impact of burnout on an employee's intention to remain in

an organization. Thus JD-R Model was not suitable as the theoretical framework for this study because the moderating factor of resilience and the dependent variable of intent to stay were not covered by this theory.

Conservation of Resources Theory

In 1989, Hobfoll developed the conservation of resources theory. In this theory, stress is explained as a phenomenon that can be handled while meeting employees' social and physical demands (Hobfoll & Freedy, 2017). According to the conservation of resources theory, stress is an individual's reaction to the threat of resource loss, as well as the actual loss of resources, when one is unable to acquire necessary resources after investing time, skill, and knowledge (Hobfoll, 1989). There is a possibility of chronic stress and burnout resulting from perceived or real threats to any of the person's essential resources (food/shelter), conditions (health conditions/personal relationships), personal characteristics (stress coping skills/social support), or energy (time and work pressure; Hobfoll, 1989). According to conservation of resources theory, burnout and work performance are causally related, and the results of this chronic stress may result in medication errors, treatment mistakes, or failure to recognize decompensation in patients (Hobfoll, 1989). The conservation of resources theory suggests that a perceived or actual threat to a person's essential resources can result in burnout and decreased job performance (Hobfoll, 1989). Since this theory does not address the effect of burnout on the intention to leave, or whether the nurses' resilience may impact burnout, it cannot be used as a framework for my study.

Burnout

Professionalism in nursing is defined by a commitment to the vocation and to providing the highest quality of care to patients (Guo et al., 2018). In a clinical environment where nurses are resilient and do not burn out, patients receive a higher level of care, team communication is improved, there is increased accountability among all practitioners, and the overall clinical environment is more conducive to better care (Labrague & De Los Santos, 2020; Roberts et al., 2021). Physical and emotional demands are inherent in the profession of nursing (Labrague & De Los Santos, 2020). Thus, there is a risk of burnout and stress-related illnesses among some nurses due to high role expectations and challenging working conditions (Guo et al., 2018; Roberts et al., 2021). The strenuous workload, increased changes in work shifts, lack of performance feedback, and low pay cause irritation and mental and physical exhaustion in employees, resulting in high turnover rates in an organization (Murat et al., 2021; Shah et al., 2021; Wen et al., 2020). The concept of burnout is divided into the physical and behavioral components, where the physical symptoms are expressed as fatigue and exhaustion, and the behavioral component is conveyed through difficulty in controlling emotions and poor work performance (Maslach & Leiter, 2016; Shah et al., 2021; Wen et al., 2020). According to Willard-Grace et al. (2019), occupational burnout is not a medical condition or a mental health disorder. It is considered a phenomenon in an occupational context that concerns the well-being of an individual who experiences prolonged stress (Willard-Grace et al., 2019). The theoretical conceptualization of burnout has been advanced by

Shah et al. (2021) and Wen et al. (2020), who added to the previous definition of burnout by adding depersonalization and a reduced sense of personal accomplishment factors, which include feelings of detachment and negative attitudes towards customers and feeling of inadequacy in the workplace.

There is a difference between burnout and typical job stress. Over-engagement causes stress, while burnout is a physical and emotional reaction to over-engagement (Deng et al., 2021). Burnout can cause a variety of problems, including losing talented nurses to other careers, as well as adversely affecting nurses' moods, habits, and general well-being (Deng et al., 2021; Denning et al., 2021). Patients may be put at great risk because of burnout's effects such as stress, exhaustion, and complacency (Denning et al., 2021). Hospitals are also affected by a high rate of nurse burnout because of high turnover costs (Galanis et al., 2021; Pradas-Hernández et al., 2018). A nurse who works longer hours than the standard 40 hours per week is more likely to suffer from burnout (Deng et al., 2021).

There are several factors contributing to nursing burnout, including inadequate staffing, emotional exhaustion, overburdened workloads, low workplace morale, and lack of respect (Galanis et al., 2021). An individual suffering from burnout will have difficulty focusing or thinking clearly, may have difficulty recalling details or conversations, and may be unable to make decisions or solve problems (Galanis et al., 2021; Pradas-Hernández et al., 2018). Depersonalization, apathy, frustration, irritability, sadness, and numbness are all psychological symptoms of burnout (Agarwal et al., 2020; Verweij et

al., 2018). Sleep problems, gastrointestinal problems, and headaches are some of the physical symptoms of this condition (Agarwal et al., 2020). As a result of burnout, individuals experience increased risk-taking behaviors, diminished ability to support their team, and a tendency to abuse substances (Soto-Rubio et al., 2020).

Burnout is prevalent in healthcare professionals because job burnout is a type of work-related stress that is a combination of physical and mental exhaustion and personal doubts about self-competency and the value of work performed (Brady et al., 2020; Low et al., 2019; Koutsimani et al., 2019). Physiological and mental exhaustion that causes burnout negatively impacts productivity, organizational commitment, and interpersonal communication in the workplace. When occupational stress is exaggerated in terms of excessive workload, continuous demands from organizational leaders, and an uncomfortable work environment, this leads to burnout (Barello et al., 2020; Raudenská et al., 2020). Previous research has used the Maslach Burnout Inventory to identify burnout symptoms such as emotional exhaustion, depersonalization, and lack of accomplishment (Slabšinskienė et al., 2021; Whittington et al., 2021). A healthcare provider's burnout often results in negative emotions that influence their lifestyle choices (Yates, 2020; Zheng et al., 2018). Mental, emotional, and physical burnout leads to depersonalization and decline in the feelings of accomplishment among direct patient care providers and, in some cases, can lead to anxiety (Brady et al., 2020; Low et al., 2019). Job-related burnout has significantly impacted patient care, patient safety, and the overall well-being of healthcare providers (Brady et al., 2020; Koutsimani et al., 2019).

Absenteeism and high turnover due to burnout also cause a significant decline in the productivity and profitability of any organization (Tang & Hudson, 2019; Tarro et al., 2020).

As a result of burnout, individuals may act in many different ways in their daily lives. Nursing professionals may be withdrawing from social interactions, canceling activities frequently, or avoiding them altogether (Agarwal et al., 2020; Soto-Rubio et al., 2020). Additionally, they may display signs of emotional exhaustion such as coldness, distance, or avoidance (Soto-Rubio et al., 2020). Nursing professionals experiencing burnout may display sleep deprivation, such as not sleeping, oversleeping, or feeling unrested, resentment of patients or colleagues, including holding grudges against, avoiding, or being condescending toward patients and colleagues, and even suffer physiological symptoms associated with a weakened immune system, digestive issues such as irritable bowel syndrome and constipation, or even heart palpitations (Agarwal et al., 2020; Deng et al., 2021; Denning et al., 2021).

Healthcare organizations experience high turnover as a result of the psychological and physical effects of burnout on healthcare providers (Whittington et al., 2021; Yates, 2020). In response to the COVID-19 pandemic, nursing professionals, physicians, and first responders have been more stressed and burned out than ever before (Rivas et al., 2021; Sklar et al., 2021). A dimension of burnout, psychological distress, results in negative impacts on both family relationships and work-related concerns (Feder et al., 2021; Mantri et al., 2021). Work changes and increased productivity for healthcare

facilities due to a large number of patients due to COVID-19 have contributed to burnout and turnout intentions in healthcare and mental healthcare providers (Mantri et al., 2021; Rivas et al., 2021; Sklar et al., 2021).

In healthcare organizations, disengaged employees cost about 34% of salaries in lost productivity, higher absenteeism, and lower profitability due to disengagement (Agarwal et al., 2020). Employee burnout accounts for 20-50% of employer turnover (Agarwal et al., 2020; Deng et al., 2021). In addition to time pressure, chaotic working environments, minimal control of the pace of work, and a lack of organizational support, direct patient caregivers point to burnout as a contributing factor (Denning et al., 2021). The effects of burnout include emotional exhaustion, feelings of incompetence and failure, poor patient interactions, diminished performance at work that may jeopardize patient safety and care quality, family stress, and, in severe cases, suicide (Denning et al., 2021; Harolds, 2020). It is increasingly difficult for physicians to keep up with the growing amount of data they are required to assimilate to make decisions, such as information from new research and changes in reimbursement regulations, but they are not granted more time to do their jobs (Agarwal et al., 2020; Harolds, 2020). For healthcare organizations to achieve long-term sustainability, they should begin automating their repetitive, rule-driven, and burnout-producing processes (Agarwal et al., 2020; Deng et al., 2021; Denning et al., 2021).

A company's performance is highly influenced by its employees (Agarwal et al., 2020; Denning et al., 2021). To increase productivity, each employee must be in good

health. It is likely that an organization's quality and quantity of output will suffer when a significant portion of its workforce suffers burnout (Deng at al., 2021; Harolds, 2020). The United States Department of Labor has conducted various studies to examine whether happy employees are more productive, as part of its efforts to investigate the relationship between employee satisfaction and productivity (Martin et al., 2020). One of the key findings of their study was that being in a positive mood can increase an employee's creativity, positive emotions contribute to the employee's innovation capability, experimental studies have demonstrated that positive emotions are associated with improved memory in employees and may even improve an employee's performance at work (Deng et al., 2021; Verweij et al., 2018). An important point to take away from this is that employees in a healthy mental state perform better than those who are stressed (Agarwal et al., 2020; Deng et al., 2021).

Healthcare workers who are highly trained are more valuable when they are making the most of their abilities, delivering greater value to their patients and employers as well as experiencing higher job satisfaction and meaning (Agarwal et al., 2020; Harolds, 2020). Exhaustion negatively impacts both personal and organizational productivity (Deng et al., 2021). On an individual level, this is accomplished by reducing motivation, problem-solving skills, and attention span (Martin et al., 2020; Verweij et al., 2018). Consequently, it reduces employee retention, output, and engagement, which lowers the organization's productivity (Deng et al., Denning et al., 2021). The stress of this nature may be misinterpreted in the workplace as procrastination, difficulties in

collaborating with colleagues, insufficient sleep, or loss of commitment and interest (Agarwal et., 2020).

Burnout detracts from productivity on a personal level by causing cognitive deficiencies which make it difficult to perform effectively at work (Deng et al., 2021; Harolds, 2020). Among such cognitive deficiencies are reduced attention spans, complete absent-mindedness, a limited ability to solve problems, insufficient motivation, and a disparaging attitude toward employment (Harolds, 2020; Martin et., 2020; Verweij et al., 2018). A particular characteristic of individuals experiencing burnout is that they often have difficulty solving problems and learning, have difficulty staying focused throughout daily tasks, and fail to keep important information, such as names and appointments, according to recent studies, which have been replicated by other researchers (Grensman et al., 2018; Koutsimani et al., 2021).

The symptoms of burnout are often accompanied by cognitive deficits. Even when measured by objective neuropsychological batteries, nursing professionals who suffer from burnout exhibit cognitive deficits (Zhang et al., 2020). There is evidence that burnout has been associated with cognitive impairment, especially with regard to executive function, attention, and memory impairments (Grensman et al., 2018; Koutsimani et al., 2021; Zhang et al., 2020). The link between burnout and poor performance on tasks of sustained attention and inhibition is well known; however, flexibility, such as the ability to shift between multiple tasks, is an important dimension of executive functioning (Grensman et al., 2018; Harolds, 2020; Martin et., 2020).

As a result of work-related stress, employees who are exhausted performed worse on tasks requiring attention and visuo-spatial construction than those who were healthy (Chen et al., 2019; Koutsimani et al., 2021; Martin et al., 2020). A burnout employee performs worse on executive control tasks, attention span, working memory, learning, and episodic memory in comparison to a healthy control employee (Chen et al., 2019; Grensman et al., 2018; Koutsimani et al., 2021; Verweij et al., 2018). Experiencing chronic stress can negatively affect cognition and may lead to psychological disorders including anxiety, depression, and burnout (Chen et al., 2019; Grensman et al., 2018; Koutsimani et al., 2021; Martin et al., 2020). Burnout is a result of chronic stress that can negatively impact the cognitive functions of the brain.

Depersonalization

The concept of depersonalization consists of a state of one's mind where an individual feels that they have changed due to changes in their life that are beyond their control (Rotenstein et al., 2018; West et al., 2016). Healthcare providers often experience the feeling of altered perceptions of self and the environment as a part of psychological distress when working long hours and providing patient care to a large patient population (Miguel-Puga et al., 2021; West et al., 2016). Some common symptoms of depersonalization that a direct patient healthcare provider may experience include difficulty focusing on tasks, anxiety or depression, problems in interprofessional collaboration, and these symptoms interfere with their ability to function and provide high-quality patient care (West et al., 2016, Rotenstein et al., 2018, Miguel-Puga et al.,

2021). Depersonalization in direct patient healthcare providers can be mild or severe and is considered one of the contributing factors to burnout (Miguel-Puga et al., 2021; West et al., 2016).

Burnout can result in direct healthcare providers becoming unfeeling in response to others, known as depersonalization (Lacy & Chan, 2018; Li et al., 2018). For direct patient healthcare providers, this means a sense of detachment from both patients and other healthcare providers. Depersonalization strongly influences professional performance negatively (Lacy & Chan, 2018; Li et al., 2018). Developing a callous or uncaring attitude, even hostility, toward others is another aspect of depersonalization that healthcare providers experience (Rodrigues et al., 2018). Depersonalization for direct patient healthcare providers is the feeling of being disconnected from one's surroundings, especially in providers with demanding and stressful workloads who disconnect from their work mentally to feel unburdened by too much stress that they are experiencing (Luceño-Moreno et al., 2020; Li et al., 2018; Rodrigues et al., 2018). Stress, anxiety, depression, lack of sleep, patient to provider ratio, and other causes contribute to depersonalization (Li et al., 2018, West et al., 2016).

An engaged and healthy workforce is likely to put in more hours and to be more creative and innovative as they conduct their daily duties (Deng et al., 2021). The leading cause of employee turnover is burnout (Agarwal et al., 2020; Deng et al., 2021; Denning et al., 2021). Burnout is considered to be one of the most significant factors contributing to physician turnover, according to a recent study (Deng et al., 2021). Staff retention is at

risk due to burnout (Deng et al., 2021; Harolds, 2020). By increasing turnover, burnout can adversely affect an organization's overall productivity by draining away valuable talent, leading to an increase in the amount spent replacing that employee, depriving the business of thousands of dollars that would otherwise have been used to generate income (Harolds, 2020; Martin et al., 2020; Verweij et al., 2018).

Self-Efficacy

Self-efficacy is an individual's belief that they can perform the necessary behaviors to fulfill specific goals or attainments (Chang et al., 2018; Pereira et al., 2021). The concept of self-efficacy relates to a person's belief that he or she is capable of executing specific behaviors in order to attain specific goals (Chang et al., 2018; Pereira et al., 2021). When a direct patient healthcare provider lacks the belief that they can succeed in providing a high quality of patient care or lack the necessary control of their actions to achieve designated performance levels (Parent-Lamarche & Fernet, 2020; Chang et al., 2018). Self-efficacy can also be defined as an amount of effort that an individual is willing to make in a workplace setting or difficult situations in terms of making plans, organization, and applying the knowledge and skills (Pereira et al., 2021; Parent-Lamarche & Fernet, 2020). Albert Bandura's definition that states that it is individuals' beliefs in their capabilities to exercise control over their own functions and events in their lives (Bandura, 1997).

Self-efficacy is defined by the psychologist Albert Bandura as the belief that people have the ability to exert control over their own lives and how they function as a

result (Bandura, 1977; Bandura, 1997). As well as promoting motivation, well-being, and personal accomplishment, one's sense of self-efficacy may serve as a basis for self-esteem and self-assurance (Cope et al., 2020; Eller et al., 2018). Among four major factors that affect people's beliefs in their efficacy, these are mastery experiences, vicarious experiences, social influences, and emotional influences (Goussinsky & Livne, 2019; Moran et al., 2021; Salles, 2017). It has been found that self-efficacy is linked to many daily benefits, such as resilience to adversity and stress, healthy lifestyle habits, improved employees' performance, and academic achievement (Zamani-Alavijeh et al., 2019; Molero Jurado et al., 2019; Eller et al., 2018). One's performance outcomes are determined by one's previous performance at different tasks and experiences, which can act as an encouragement to individuals to take on new challenges and encourage them to improve their performance (Molero Jurado et al., 2019; Eller et al., 2018).

An individual's level of self-efficacy reflects their level of capability in completing tasks (Goussinsky & Livine, 2019; Moran et al, 2021; Zamani-Alavijeh et al., 2019). Depending on the situation, the individual may be able to accomplish the task successfully or may fail but still have an established sense of self-efficacy (Salles, 2017; Zamani-Alavijeh et al., 2019). In addition to social models, one other aspect of self-efficacy refers to how others succeed at completing tasks; when others accomplish tasks successfully, they become role models, inspiring positive beliefs in others (Cope et al., 2020; Moran et al., 2021). Verbal persuasion is employed by organizational leaders to encourage employees to develop self-efficacy. A person's emotional, physical, and

psychological health affects their level of self-efficacy and job performance. The subsequent impact of their physical and mental health on their performance at work can be seen in their self-efficacy. As Maddux (2013) explained, if employees see themselves excelling in a particular situation at work, they are more likely to achieve their goals and improve their self-efficacy.

Emotional Exhaustion

Emotional exhaustion is one of the contributing factors to burnout among healthcare providers (Edwards & Wilkerson, 2020; Hwang et al., 2021). Emotional exhaustion can occur as a result of work-related stress and strain where symptoms include feeling exhausted, irritable, frustrated, and lacking the ability to handle stressful situations (Jiménez-Ortiz et al., 2019; López-Cabarcos et al., 2019). The concept of emotional exhaustion is based on work-related stress and strain with symptoms of being emotionally tired, irritability, frustration, and lack of emotional resources to handle stressful situations (Jiménez-Ortiz et al., 2019; López-Cabarcos et al., 2019). There is also strong evidence that emotional exhaustion and job satisfaction can significantly affect performance in organizational settings: emotional exhaustion in the sense of a barrier to effective performance (Evanoff et al., 2020; Mheidly et al., 2020).

Burnout is often seen as largely driven by emotional exhaustion, which has been linked to varied negative organizational results and personal dysfunctions including a rise in counterproductive work behaviors, turnover intentions, and sickness absence as well as mental health problems (Evanoff et al., 2020; Lee et al., 2020). In direct patient

healthcare providers, emotional exhaustion is considered to be an indicator of poor mental health (Evanoff et al., 2020; Lee et al., 2020). Despite numerous job demands having been identified as predictors of emotional exhaustion, prior research has confirmed that workload and associated phenomena, such as time and work pressure, are the main determinants of emotional exhaustion among various occupational settings (Lee et al., 2020; Mheidly et al., 2020).

Chronic physical and mental exhaustion resulting from excessive job demands, personal demands, and continuous stress produces emotional exhaustion (Aronsson et al., 2017). Emotional exhaustion in direct patient healthcare providers is affected by a number of factors including personal resources, coping strategies, organizational culture, and leadership (Chen et al., 2021; Sacadura-Leite et al., 2020). A healthcare organization leader should recognize signs of emotional exhaustion exhibited by their direct patient healthcare providers, such as lack of mental focus, decreased motivation, and irritability (Aronsson et al., 2017; Sacadura-Leite et al., 2020). Chronic fatigue and insomnia are physical symptoms of burnout, and the signs of detachment may manifest themselves as pessimism or self-isolation (Barello et al., 2020; Li et al., 2018). Healthcare providers who suffer from burnout are less productive and perform poorly at work (Woo et al., 2018). Burnout among healthcare workers in a variety of specialties can have negative implications for patients as well as the overall productivity and profitability of an organization (Barello et al., 2020; Li et al., 2018; Woo et al., 2018).

The emotional exhaustion associated with burnout is a critical symptom. Employees who work in occupations that require a high level of empathy, the management of emotions, and constant interaction with patients are at increased risk for developing emotional exhaustion (Fiabane et al., 2019; Jang et al., 2020). Healthcare providers who have direct access to patients are more likely to display emotions that are in contrast with their actual feelings, and this may result in them mismanaging their emotions to meet the expectations of patients and their families, leading to emotional exhaustion (Jang et al., 2020; Klusmann et al., 2021). Symptoms of emotional exhaustion often include insomnia, loss of appetite, lack of motivation, irritability, and physical fatigue (Fiabane et al., 2019; Klusmann et al., 2021).

Burnout and Medical Errors

Reith (2018) stated patient care may suffer as a result of the burnout epidemic while Des Santos (2020) stated that overloaded responsibilities can cause nursing professionals to experience high levels of stress and burnout, which may result in low self-efficacy. COVID-19 pandemic had significant impact on the fatigue and burnout levels among healthcare providers (Santos, 2020). The levels of resilience and ability to tolerate uncertainty are significant factors that determine burnout levels in healthcare providers during the COVID-19 pandemic (Di Trani et al., 2021). Medical error rates and provider productivity have been examined in the past in relation to burnout (Medisauskaite & Kamau, 2019; Patel et al., 2018; Yates, 2020). Several studies have demonstrated when direct patient care providers experience stress that leads to burnout,

this results in preventable medical errors that may cause thousands of deaths (Medisauskaite & Kamau, 2019; Patel et al., 2018; Yates, 2020). There has been an increased awareness of burnout and poor health among direct patient care providers, which has been associated with decreased patient safety and an increase in medical errors in healthcare organizations (Tawfik et al., 2018; Yates, 2020). Researchers have shown burnout is linked to self-reported medical errors, and direct healthcare providers who experience burnout are more likely to make major errors (Patel et al., 2018; Tawfik et al., 2018).

As a result of burnout, direct healthcare providers' performance and patient care delivery is adversely affected (Kwah et al., 2016; Patel et al., 2019; Wilson et al., 2017). Medical errors can be caused by burnout and emotional exhaustion across all specialties and identifying and reporting signs of burnout and emotional exhaustion by healthcare providers can prevent medical errors and improve the overall provision of patient care. Medical errors related to burnout were primarily due to errors in judgment, incorrect diagnoses, and technical issues (Patel et al., 2019; Tsiga et al., 2017; Wilson et al., 2017).

A healthcare organization's productivity and profitability may be adversely affected by direct healthcare providers suffering from burnout and emotional exhaustion (Kwah et al., 2016; Patel et al., 2016; Tsiga et al., 2017). The rate of medical errors increases, as well as serious personal consequences, when providers are experiencing emotional exhaustion and depersonalization as a result of burnout (Kwah et al., 2016; Patel et al., 2016; Tsiga et al., 2017). Medical errors reported by direct patient care

providers often cause burnout, fatigue, and compromise the safety of work units (Di Trani et al., 2021; Edwards & Wilkerson, 2020; Evamoff et al., 2020). A burnout predicts the reporting of medical errors, and organizational leaders attempt to reduce medical errors associated with burnout and emotional exhaustion by improving the safety practices of individual work units and by improving the mental and physical well-being of providers (Feder et al., 2021; Hwang et al., 2021; Lopez-Cabarcos et al., 2019). Leaders can reduce medical errors in organizations by focusing on reducing burnout among direct patient care providers (Medisauskaite & Kamau, 2019; Patel et al., 2018).

Resilience

There is a worldwide shortage of healthcare providers, and direct patient healthcare provider burnout has been identified as a major contributing factor (Luceño-Moreno et al., 2020; O'Connor et al., 2021). Recent studies have examined this issue. The well-recognized high rate of burnout among nurses suggests that resilience may be a significant predictor of burnout for nurses (O'Connor et al., 2021). Previous research has not examined the relationship between burnout and resilience extensively. Healthcare providers demonstrated moderate levels of resilience despite experiencing severe burnout symptoms (Luceño-Moreno et al., 2020; Pollock et al., 2020). It has been demonstrated that burnout symptoms significantly negatively correlate with resilience, and this provides evidence for the role of resilience in influencing burnout (Luceño-Moreno et al., 2020). Direct patient healthcare providers must be provided with flexible and effective interventions to reduce burnout and stress at work (O'Connor et al., 2021; Pollock et al.,

2020). The hospital administrators should establish a health care management system that focuses on creating a harmonious workplace and adopting positive attitudes to increase resilience in direct patient healthcare providers (Luceño-Moreno et al., 2020, O'Connor et al., 2021; Pollock et al., 2020).

The COVID-19 pandemic had significantly impacted the physical and mental well-being of direct patient care providers. During the COVID-19 pandemic, direct patient care providers and the healthcare teams were severely affected in terms of the overall delivery of patient care (Liu et al., 2021). The recent evidence has shown that direct patient healthcare providers' perceptions that COVID-19 is a threat negatively impacted their behaviors, such as their intention to stay and their resilience level (Lieu et al., 2021; Yu et al., 2021). According to literature, positive psychology plays a significant role in retaining direct patient healthcare providers as it promotes a focus on strengths rather than weaknesses (Gensimore et al., 2020; Liu et al., 2021). Positive psychologists define resilience as the ability to adapt well under stressful conditions, such as those produced by adversity, trauma, or hardship, such as the COVID-19 pandemic (Liu et al., 2021; Yu et al., 2021). A person's level of resilience plays an important role in the indirect effects of work characteristics and burnout (Capper et al., 2020; Gensimore et al., 2020). This evidence supports the notion that various situations such as pandemic can affect the resilience and mental and physical well-being of healthcare providers that ultimately the healthcare providers' intent to stay.

A person's level of resilience plays an important role in the indirect effects of work characteristics and burnout (Capper et al., 2020; Gensimore et al., 2020). Direct patient healthcare providers with low resilience experience less burnout when their anxiety was low (Yu et al., 2021). A healthcare provider may experience coping strategies, anxiety, mindfulness, or a combination of these factors, which may affect the provider's intention to stay in a healthcare organization (Gensimore et al., 2020, Yu et al., 2021). It is vitally significant for providers to be able to adapt to and overcome existing difficulties in order to provide direct patient care (Setiawati et al., 2021; West et al., 2020). As a protective factor against mental illnesses, resilience can help individuals to cope with mental disorders such as anxiety and depression (Mosheva et al., 2020). There is a relationship between resilience and the level of anxiety among health workers (Mosheva et al., 2020; Setiawati et al., 2021; West et al., 2020). In the context of working with patients who have experienced trauma, patients' families grieving a tragic loss, or other stressful events, such as a new chronic or terminal disease, resilience can be an extremely important adaptation process (Mosheva et al., 2020; West et al., 2020). Individuals can learn resilience by observing their behavior, thinking, or taking action, and it is not associated with a particular personality characteristic (Setiawati et al., 2021; West et al., 2020). When confronted with a potentially physically and mentally challenging event, resilience refers to an individual's ability to cope under normal circumstances (Mosheva et al., 2020; West et al., 2020). Resilience is one of the most effective methods of dealing with an adverse event or with one that can result in burnout

since resilience is the capability of maintaining stable equilibrium (Mosheva et al., 2020; Setiawati et al., 2021; West et al., 2020).

There is a dark side to resilience, and that is burnout. Resilience, as defined by most authorities, refers to the ability to cope with adversity, trauma, tragedy, threats, or significant sources of stress (McKinley et al., 2020; Nituica et al., 2021). Individuals become resilient through a combination of knowing what they need and value both personally and professionally, developing insight, taking care of themselves, and receiving support from others (Nituica et al., 2021; Ogińska-Bulik & Michalska, 2021). The risk of burnout is reduced for direct patient care providers who spend time thinking about what is truly relevant in their work as well as for individuals who value work and life, which can contribute to personal and professional resilience (McKinley et al., 2020; Ogińska-Bulik & Michalska, 2021). It is imperative to understand how resilience impacts the providers' intent to stay in a healthcare organization.

Intent to stay is a measure of how likely direct patient healthcare providers are to stay in their profession before retirement and avoid seeking other employment opportunities (Çam, 2017; Lieu et al., 2021). Resilience can significantly enhance direct patient healthcare provider's intentions to remain in practice and has a high practical value in practice (Yu et al., 2019; Yu & Lee, 2018). Direct patient healthcare providers with high levels of resilience can increase work engagement, identify, or prevent potential problems, and ultimately achieve personal and professional growth in order to promote retention (Liu et al., 2021; Yu & Lee, 2018). High-level direct patient healthcare

providers often display greater resilience, which reduces emotional exhaustion, increases work engagement, and identifies and prevents problems (Çam, 2017; Yu & Lee, 2018). The term resilience is used to describe the ability of a person to cope with tragedy, adversity, trauma, hardship, or other significant sources of stress (Liu et al., 2021; Yu et al., 2019). In practice, resilience may have a significant impact on direct patient healthcare providers' intention to stay (Çam, 2017; Yu et al., 2019). A stressful environment can adversely affect an individual and cause burnout. Burnout is associated with psychological disorders including trauma reactions, depression, anxiety, and substance abuse (Abram & Jacobowitz, 2021; Gensimore et al., 2020). Among direct patient care providers, resilience can mitigate the negative consequences of burnout and increase their intent to stay (Gensimore et al., 2020; Liu et al., 2021). Burnout may be prevented by resilience among direct patient care providers.

Burnout and COVID-19

The risk of burnout is higher for some nurses than for others. The COVID-19 pandemic increased the risk of nurse burnout due to certain social and occupational factors (Galanis et al., 2021). There are a number of factors that increase the risk of contracting COVID-19, including young ages, decreased social support systems in the workplace and in the community, a lack of readiness to deal with COVID-19 outbreaks among family members and colleagues, a lack of specialist training in COVID-19, an increased perception of risk, and high-risk environments such as hospital workplaces with inadequate material resources and workers, long quarantine periods, and increased

workloads (Chen et al., 2021; Turale et al., 2020). In the pre-pandemic period, overload workloads, shifts without breaks, inadequate sleep and excessively long shifts are risk factors for burnout (Turale et al., 2020).

Healthcare organizations experience high turnover as a result of the psychological and physical effects of burnout on healthcare providers (Whittington et al., 2021; Yates, 2020). In response to the COVID-19 pandemic, nursing professionals, physicians, and first responders have been more stressed and burned out than ever before (Rivas et al., 2021; Sklar et al., 2021). A dimension of burnout resulting in negative impacts on both family relationships and work-related concerns is psychological distress (Feder et al., 2021; Mantri et al., 2021). Work changes and increased productivity for healthcare facilities due to a large number of patients due to COVID-19 have contributed to burnout and turnout intentions in healthcare and mental healthcare providers (Mantri et al., 2021; Rivas et al., 2021; Sklar et al., 2021).

Nursing stress and burnout have long been a topic of discussion. Stress at work contributes to high rates of burnout among nurses, which compromises patient care and costs the health care system in the United States billions of dollars annually (Jose et al., 2020; Labrague & De Los Santos, 2020). There was a significant impact of COVID-19 on healthcare systems, increasing the risks of psychological distress for healthcare workers (Roberts et al., 2021; Yörük & Güler, 2021). Working in the emergency department during a pandemic poses essential challenges for nurses regarding workload and dealing with critically ill patients and emotionally distraught relatives (Jose et al.,

2020; Yörük & Güler, 2021). Infectious diseases and pandemics, especially respiratory diseases, have the greatest psychological effects because they are typically deadly, contagious, and long-lasting; the Coronavirus outbreak is an example of such a combination (Jose et al., 2020; Roberts et al., 2021). Occupational burnout adversely affects nurses' physical and emotional well-being and is associated with rising organizational costs (Labrague & De Los Santos, 2020; Roberts et al., 2021; Yörük & Güler, 2021). As a result, patients' satisfaction and outcomes are adversely affected. Health care organizations continue to face difficulties retaining experienced nursing professionals (Labrague & De Los Santos, 2020; Yörük & Güler, 2021). To mitigate the impact on nurses' intention to stay, nurses' work environment and their resilience are both modifiable factors.

Nursing Professionals and Burnout

Currently, research focuses on the relationship between staff satisfaction and burnout and how these two factors are closely interrelated (Guo et al., 2019; McKinley et al., 2020; Ying et al., 2021). The stability of the nursing workforce is critical to providing high-quality health care in a healthcare system (Guo et al., 2018; McKinley et al., 2020). Nurse burnout is a relatively common phenomenon characterized by a reduction in nurses' energy, which manifests in emotional exhaustion, a lack of motivation, and feelings of frustration in the workplace, which may lead to a drop in productivity (Labrague & De Los Santos, 2020; McKinley et al., 2020). In addition to affecting nurses' quality of life and performance level, burnout negatively affects their

organizational commitments as well as their willingness to leave the profession. In addition, burnout affects the quality of nursing care and increases turnover rates (Guo et al., 2018; Guo et al., 2019; Roberts et al., 2021).

There are many serious problems affecting the health care sector worldwide, including high turnover rates and a shortage of nurses, which adversely affect a variety of areas, from the quality of nursing care to organizational productivity (Yörük & Güler, 2021; Zheng et al., 2020). Nevertheless, excessive turnover in nursing organizations entails patient safety concerns; incurs costs in recruiting, hiring, and training new nurses; depresses the morale of the existing nurses, as well as contributes to burnout, which in turn results in premature departures (Yörük & Güler, 2021; Zheng et al., 2020). An employee's turnover intention refers to actions such as leaving an organization, seeking another job opportunity, or contemplating leaving a job (Jose et al., 2020; McKinley et al., 2020). Personnel management should undergo an appropriate level of turnover, enabling the organization to revitalize its culture or mood and recruit qualified nursing staff.

Application to the Applied Business Problem

The objective of this quantitative correlational study is to investigate resilience as a moderator of the relationship between burnout and intention to stay among licensed registered nurses with BSN degrees working with adults in hospitals. The hypotheses for this study are that resilience does or does not moderate the relationship between burnout

and intent to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting.

Nursing professionals devote a great deal of their time and energy to treating and caring for patients. Having resilience, or the ability to bounce back quickly from a stressful event, is a key trait that nurses possess (Guo et al., 2018; McKinley et al., 2020). This helps them cope effectively and endure the stress they are subjected to. In order to maintain a high level of resilience, nurses must deal with many risks in their day-to-day lives and provide patients with standard healthcare (McKinley et al., 2020; Ying et al., 2021). By increasing their resilience, nurses can handle negative situations (Guo et al., 2018; Guo et al., 2019). Adaptation and performance are improved, and they, as a result, are more satisfied with their working experience, which reduces burnout and increases their intent to remain (Guo et al., 2019; Ying et al., 2021; Zhang et al., 2020). Research has shown that people with a high level of resilience are able to handle stress and make better decisions in a stressful environment (Guo et al., 2019; McKinley et al., 2020; Ying et al., 2021). These studies suggest that psychological resilience is a complex process. Research indicates that resilience is positively correlated with psychological well-being (Jose et al., 2020; McKinley et al., 2020; Ying et al., 2021). Resilience results in enhanced autonomy, growth, optimism in life, and a sense of purpose (Guo et al., 2018; Guo et al., 2019). Several studies have demonstrated that resilience can serve as a protective factor for nurses experiencing burnout (McKinely et al., 2020; Ying et al., 2021; Yörük & Güler, 2021; Zhang et al., 2020). It is clear, then, that resilience is

essential for nurses in order to deal with the stress, exhaustion, and frustrations they encounter daily.

There is substantial evidence to suggest that improving resilience can result in an increase in job satisfaction among nurses and a reduction in nursing turnover (Guo et al., 2018; Guo et al., 2019; Ying et al., 2021; Zhang et al., 2020). Having the ability to bounce back from challenges and become stronger and wiser is a sign of resilience. When it comes to coping with the stress caused by the COVID-19 pandemic, nurses' own resilience may be helpful (Jose et al., 2020; Roberts et al., 2021). Nurses are the most likely to experience burnout, although all healthcare providers seem to be experiencing high levels of burnout, and the problem has been rising steadily in recent years.

Transition

This quantitative correlational study aims to determine whether resilience plays a role in moderating the relationship between burnout and intention to stay among licensed registered nurses with bachelor's degrees in nursing, who work with adults in a hospital environment. Using a correlational design, this study will investigate the effects of a moderating variable and a predictor variable on the dependent variable. As a theoretical framework, this study will be guided by the social cognitive career theory. As a result of this study, business practices will gain insight into resilience as a moderating factor on burnout and intent to remain in licensed registered nurses who have a BSN degree working in a hospital setting.

Section 2: The Project

As part of the section, I will discuss the approach I will take to gain access to participants, establish a relationship with them, and ensure their anonymity and input. In Section 2, I will present the research method, design, and sample population, as well as discuss any ethical concerns that may arise. In addition, I will describe the instruments and process for collecting data, outline the methodology for analyzing data, and address the reliability and validity of the study.

Purpose Statement

The purpose of this quantitative correlational study is to investigate resilience as a moderating factor on the relationship between burnout and intention to stay for licensed registered nurses with BSN degrees working with adults in a hospital setting.

Role of the Researcher

The researcher is the primary instrument in the study because of the data collection and analysis (Byiers et al., 2020). In my role as a primary instrument of the study, my main responsibility is to collect data using the instruments that measure the moderator, predictor, and dependent variable, and conduct data analysis. As a primary instrument of the study, I will utilize various instruments to collect the responses of participants. As a researcher, I conducted a literature review, identified study variables, and decided on the sampling method and design. Data will be collected, analyzed and the results will be interpreted.

Research participants and the researcher alike bring a variety of perspectives to the study (Schroeder et al., 2022). Working with unknown participants or areas of research has both advantages and disadvantages. Bias can exist in research; for example, influencing participants to provide information that corresponds to the researcher's perception (Byiers et al., 2020; Schroeder et al., 2022). Research participants should be treated with respect and trust by researchers. I will share the nature of the study and the rights of the volunteers with them to earn their trust and confidence.

According to Byiers et al. (2020), the establishment of trust is essential when communicating with participants. By establishing a trustworthy relationship with the participants, I hope to minimize biases in the research process and gain a deeper understanding of the phenomenon being researched. Due to my 15 years of experience in the healthcare industry in the New York City area, I am familiar with the topic and research area. Even though I have extensive experience in the healthcare field, I do not have any professional influence on the participants because I will have no prior connection with potential participants.

As the researcher of this study, I must ensure that the study is limited from biases and that human participants are treated according to ethical principles as outlined in The Belmont Report. The Belmont Report was prepared by the U.S. Department of Health and Human Services for the protection of the rights of research study participants (U.S. Department of Health and Human Services, 2022). Some psychological experiments have been conducted without the use of ethical guidelines, and the results have had an adverse

impact on the physical and mental health of participants (Klitzman, 2022). To comply with all ethical standards during my research, I will implement three strategies in accordance with Klitzman's (2022) recommendations. To respect the participants' privacy and rights, I will inform them that participation in the study is voluntary, and I will obtain their consent before beginning data collection. Furthermore, I will discuss with each participant the risks and benefits associated with participation in the study, as well as the informed consent form. According to Josephson and Smale (2020), informed consent provides participants with information about their rights as participants in research. I will demonstrate the beneficence of participants by not disclosing their identifying information and ensuring that the survey responses will be confidential and secure. I will demonstrate justice by treating the study participants fairly and equally.

Researchers may intentionally or unintentionally introduce bias into their research (Byiers et al., 2020). As a result of bias, false conclusions are drawn, and potentially misleading information is conveyed (Byiers et al., 2020). When the researcher adds as little of their own perspectives as possible and does not write their own theories, biases can be mitigated, and data are viewed with less filtering through their own lenses (Byiers et al., 2020). Furthermore, by maintaining detailed records and being honest when reporting all results in the report, I will reduce the chance of making mistakes and mitigate bias. In order to effectively interact with study participants on social media platforms, it is important for researchers to be aware of their own world views, cultural experiences, and upbringing (Byiers et al., 2020). While collecting and analyzing data,

protecting participants' rights, and ensuring the study findings reflect the perspectives of participants, my role as a researcher will be to avoid biases related to employee resilience, burnout, and intent to stay in the healthcare sector.

Participants

The selected population for this study will consist of licensed registered nurses with BSN degrees working with adults in a hospital setting in the United States of America. Licensed registered nurses with BSN degrees working with adults in a hospital setting experience emotional exhaustion, depersonalization, and declines in self-efficacy as they provide health care services to patients from across the country (Feder et al., 2021; Mantri et al., 2021). According to Mantri et al. (2021), it is imperative to target participants that possess the necessary knowledge and experience to complete the survey to answer my research question.

Having a broader and possibly more diverse sample population will enable the topic to be viewed from a broader perspective. Participants will be recruited using LinkedIn, Facebook, and the CentraState Medical Center. Posting recruitment posts in specialized groups on social media platforms Facebook and LinkedIn, I will reach the target audience of licensed registered nurses with BSN degrees working with adults in a hospital setting. Participants will be recruited through social networks by using an online invitation for study participation (Appendix G). The online advertisement will include a link to the study information and survey.

The first page of the survey will determine eligibility, and the second page will be the informed consent that the participants will have to electronically sign to move onto the study questions. If the participants have any questions about the study, I will be available by e-mail or telephone. Turaga (2019) recognized that effective communication requires a speaker and listener to be on the same page. Throughout the entire process, I will establish a collaborative working relationship with the participants. As part of building a trusting working relationship with participants, I will provide a detailed explanation of the study, ensure that informed consent has been obtained, and provide a synopsis of the analysis after completion of the study. I will also make myself available to participants via email or telephone to answer any questions they may have about the study. Adiguzel (2019) noted that effective communication enhances the relationship between structuring, evaluating, and understanding messages in the home. On the bottom of each survey page, the participants will be reminded that they will be able to opt out of participating in the study at any time.

Research Method and Design

Research methodology is the overall structure of a research study, whereas research design is the processes, procedures, and tools used in collecting and analyzing data (Yin, 2018). When conducting research, a researcher must make decisions regarding the study's methodology and design. Qualitative, quantitative, and mixed methods are the three types of research methods (Yin, 2018). An important criterion for determining the feasibility of a study is its research design.

Research Method

I chose quantitative methodology for my study. Quantitative research methodology is used to create hypotheses about interaction between variables (Ratelle et al., 2019). The quantitative methodology is appropriate for this study as I will be testing hypotheses using closed-ended questions. The purpose of this type of research is to identify logic and data collection methods, as well as to utilize statistical methods for the analysis of numerical data in order to form conclusions to determine if hypotheses should be retained of rejected (Ratelle et al., 2019). In contrast, qualitative methodology would not be appropriate for this study because the data collected would be highly subjective and data rigidity and validity would be more difficult to assess. Qualitative researchers use open ended questions to discover what is occurring or has occurred (Cristancho et al., 2018). Therefore, I will not use qualitative methodology because to determine a relationship, the data needs to be objective (Cristancho et al., 2018). Mixed method research includes both a qualitative and quantitative element (Andrade, 2021). To explore the correlation between resilience, burnout, and intent to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting, I will not be examining the perspectives of participants that is a part of a qualitative portion of a mixed study.

Research Design

This study will use a correlational design to determine how much the moderating variable affects the relationship between the predictor variable and the dependent variable. In cases where independent variables will not be altered, researchers prefer

correlational designs (Curtis et al., 2016). In correlational research, researchers determine whether there are positive or negative relationships between two or more variables using statistics (Bloomfield & Fisher, 2019). As part of a casual-comparative study, researchers compare two groups to identify the causes or consequences of existing differences between or among the groups; casual comparative studies do not incorporate randomization (Martino, 2021). Since this study has one predictive variable, one dependent variable, and one moderating variable, it is optimal to use a correlation research design in order to examine the relationship between two or more variables.

A causal-comparative design is not suitable for this study because the goal of the study is to determine the extent to which resilience moderates employees' burnout and intent to stay with the organization. It is not my intention to investigate the causes or consequences of differences that already exist between or among nursing professionals who experience burnout and those who do not. Quasi-experiments are research designs that attempt to establish cause-and-effect relationships (Miller et al., 2020). A quasi-experimental study would not be appropriate because it includes manipulation of independent variables and does not randomly assign participants to control and intervention groups. Quasi-experiments involve conducting a pretest prior to administering interventions as well as conducting the same test after the interventions have been administered (Miller et al., 2020). Since pre- and post-testing will not be conducted in this study, a quasi-experiment is not appropriate. Experimental research involves controlling and manipulating the environment in which the experiment takes

place, as well as the independent variable (Benedetti et al., 2022). Experimental research would also not be appropriate for this study because experimental research takes place in a controlled environment, and this study's environment is not controlled. In addition, experimental research has random assignment of participants rather than a convenience sample like this study.

Population and Sampling

The population for this study consists of all licensed registered nurses with BSN degrees working with adults in a hospital setting just as the research question requires to be answered. When conducting quantitative research, the researcher selects a defined sample for data collection and then uses either a probabilistic or a nonprobabilistic sampling methodology (Turner, 2020). An analysis of the data is then performed numerically, and then it is interpreted to explain the findings (Lopez, 2022). There are many non-probabilistic sampling approaches, such as convenience, availability, purposive sampling, quota sampling, and snowball sampling, along with a probabilistic sampling approaches, such as simple random sampling, stratified sampling, systematic sampling, and cluster sampling (Turner, 2020).

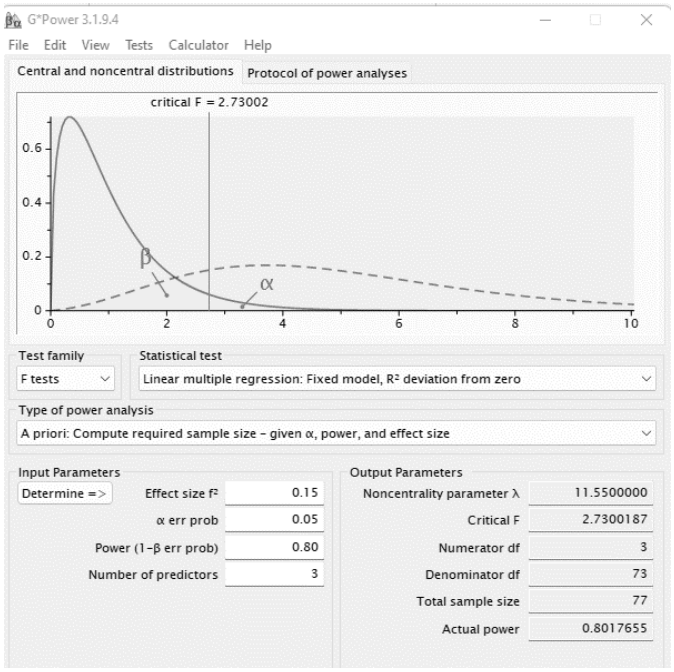
Convenience sampling will be used in this study. Convenience sampling is often the tool of choice for researchers as it is practical and economic (Tenny et al., 2022); however, it can create serious biases in the results. A convenience sampling technique involves taking samples from individuals who are readily available to the researcher to gather data (Palinkas et al., 2019; Tenny et al., 2022). This eliminates the need for the

researcher to make extra efforts or go out of their way to collect the data. Another advantage of this type of sampling is the convenience sampling technique allows for the study to be completed in a shorter period of time (Tenny et al., 2022). Data collected by convenience sampling may reflect only the views of a specific group rather than the views of the entire population. The use of convenience sampling is also extremely cost-effective (Turner, 2020). Conversely, the disadvantage of this sampling method is under-representation occurs in some groups, while over-representation occurs in others (Turner, 2020). Due to the bias inherent in this type of sample selection, there is a strong likelihood that the study could contain sampling errors. Accordingly, it will be impossible to generalize the results of this study and state that they apply to the entire population of the study.

To best facilitate user participation in the survey, collect data, and manage the results, I will use SurveyMonkey online application. G*Power software 3.1.9.3 was used to conduct a power analysis to determine sample size. According to power analysis computation, where confidence level set at α=.05, margin of error at 5%, and assumed a medium effect size of f^2 =.15, to achieve a power of .80, with one predictor, one moderator, and one dependent variable, the calculated sample size is 77 participants that will be appropriate for this study (Figure 2).

Figure 2

*G*Power Calculation*



Ethical Research

Human subject research involves enrolling volunteers through an informed consent process that follows basic ethical principles of autonomy, beneficence, justice, and nonmaleficence (Artal & Rubenfeld, 2017; Koonrungsesomboon et al., 2016). In every research study, ethical issues should be addressed. I obtained approval from Walden University's Institutional Review Board (IRB) before interacting with participants. Walden University's IRB approval number is 05-24-23-1059021, and the expiration date is May 23, 2024. In addition, to ensure that my research complies with U.S. federal regulations, I will adhere to the recommendations on participant confidentiality and data

storage outlined in *The Belmont Report* (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979).

I will publish an invitation containing the link to the study information, eligibility screening, and survey on the following social media sites: Facebook and LinkedIn (see Appendix G). A participant will be directed to the SurveyMonkey's research site by clicking the survey link on the invitation. On the first page of the survey, participants will see the purpose of the study. On the second page, participants will be asked to answer eligibility questions about their occupation and level of education. Once the eligibility criteria are met, participants will be presented with the informed consent on the third page. At the end of that page, the participants will be asked to check the box and click the button if they confirm their agreement to participate in the study. If they do not check the box, they will be prevented from going forward to the survey instruments. For research to be ethical, each participant must give informed consent and voluntarily participate (Josephson & Smale, 2020).

The primary function of an informed consent is ethical, but it has legal implications as well (Koonrungsesomboon et al., 2016; Shepherd & Macklin, 2019). Essentially, informed consent is an ethical doctrine whose purpose is to ensure that a study participant is informed about the purpose of the study, what their participation entails, and that they have a voluntary decision to participate or withdraw from the study (Artal & Rubenfeld, 2017; Shepherd & Macklin, 2019). An informed consent form will be provided on the fourth page of the survey with specific information about the research

study, instructions on how to participate, potential risks, information regarding voluntary participation, a statement emphasizing the right to withdraw without consequence, and a discussion of how participant information will be protected (Appendix H). After a participant reads the informed consent, a checkbox will be provided for the participant to indicate their understanding agreement to participate in the study. In the event that a participant declines to check the agreement box, they will be thanked and will not be able to participate in this study. Incentives will not be provided to participants. At any time, participants may withdraw from the study with no repercussions by exiting the survey on the top of their screen. Participants' personal information and their place of employment will not be asked in the survey. The data will be stored on a password-protected USB flash drive which will only be accessible by me for a period of 5 years before being destroyed. Walden University Institutional Review Board will approve this doctoral study. The approval number is 05-24-23-1059021 and it expires on May 23, 2024.

Data Collection Instruments

I will use three standardized instruments in this study: Maslach Burnout Inventory-Human Services Survey (MBI-HSS), McCain Intent to Stay scale, and Connor-Davidson Resilience Scale (CR-RISC). The measurement for the variables will be ordinal (Likert scale- five point from strongly disagree to strongly agree), but the average values used in final data analysis will be interval.

Maslach Burnout Inventory-Human Services Survey

A Maslach burnout inventory was developed by Maslach and Jackson (Maslach & Jackson, 1981). According to the Maslach burnout inventory, which has 22 questions, burnout can be evaluated on three subdimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment. A burnout score is determined by adding the scores from three subscales. A high burnout score reflects a high degree of emotional exhaustion, depersonalization, and reduced performance. There will be an ordinal 5-point Likert-type scale for each question in the survey where 1 = *strongly disagree* and 5 = *strongly agree*. The summation of the participant's answers for all the questions in this section of the survey is the value for each participant's burnout score. Participants should be able to complete this section of the survey within 15 minutes.

Based on Gorter et al. (1999), the three dimensions of the MBI are used to guide and shape most empirical and theoretical research on burnout. Research has shown that MBI is a valid instrument for measuring burnout and is widely respected (Portoghese et al., 2018). Even though there are other tools available for measuring burnout, such as, for example, the Copenhagen Burnout Inventory, Maslach Burnout Inventory is the most widely used. To measure burnout, the Maslach Burnout Inventory is often used, particularly in groups (Gorter et al., 1999). The Maslach Burnout Inventory used for data collection in this study is included in Appendix A. As part of the SurveyMonkey survey, participants will be required to complete the Maslach Burnout Inventory (MBI). Permission will be granted by Mind Garden (Appendix B). MBI-General Survey (MBI-

GS) will be used for this study as it is designed to be used across a wide range of occupational groups including nursing professionals. Psychometric aspects of the Maslach Burnout Inventory, reliability for internal consistency was reported as Cronbach's alpha coefficient (0.881) with the test-retest reliability being high and statistically significant at $p < 0.001$ at Cronbach's alpha coefficient values of 0.858, 0.910, and 0.890 (Wickramasinghe et al., 2018). Item-convergent validity and item-discriminant validity for the Maslach Burnout Inventory was confirmed for the items on MBI according to multi-trait scaling analysis conducted by Wickramasinghe et al. (2018).

McCain Intent to Stay Scale

The McCain's Intent Scale (1990) was used to measure nurses' intent to remain in their current employment (Mueller & McCloskey, 1990). Nursing professionals will be asked to rate their intention of staying in their current position using this scale. Intent to stay at a job is determined based on the results of five items on McCain's Intent to Stay Scale (Appendix C). On the scale, there are five levels: 1-strongly disagree; 2-disagree; 3-neutral; 4-agree; and 5-strongly agree. To calculate the mean, the scores will be summed and divided by the number of questions. Higher scores will indicate a greater likelihood of staying in the organization. This scale was reported to have a Cronbach's alpha of 0.88 by Mueller and McCloskey (1990). It is reported that the tool has both face validity and content validity (Mueller & McCloskey, 1990). McCain's Intent to Stay Scale is relevant, appropriate, and measures the intent to stay in healthcare professionals (Al Yahyaei et al., 2022). This instrument also has content validity Based on a 5-point

Likert scale, any site with a mean value greater than 3 on the McCain Intent to Stay Scale will be considered as enhancing organizational climates and nurses' intent to stay. Permission to use the McCain Intent to Stay scale was obtained by contacting the Journal of Research in Nursing and is listed in Appendix C. McCain Intent to Stay scale questions will be incorporated into the survey on the SurveyMonkey website (see Appendix D).

Connor-Davidson Resilience Scale

An assessment of resilience is the Connor-Davidson Resilience Scale, which measures whether a person is able to bounce back after stressful events, tragedies, or trauma. Conner and Davidson developed the Connor-Davidson Resilience Scale in 2003 (Campbell-Sills et al., 2020). The Connor Davidson Resilience Scale is used to assess resilience. The test is designed in order to distinguish between people who have a higher level of resilience and those who have a lower level of resilience. A number of components of resilience are measured by the Connor Davidson Resilience Scale. These include the ability to adapt to change, deal with what comes along, cope with stress, remain focused, and be able to think clearly (Broche-Pérez et al., 2022). Connor-Davidson Resilience Scale also measures the ability to handle unpleasant feelings such as anger, pain, or sadness and to not get discouraged by failures (Connor & Davidson, 2003). Connor-Davidson Resilience Scale (CD-RISC-25) is a self-administered measure that contains 25 items (Appendix D). It is composed of 25 items rated on a 5-point scale: 0-not true at all, 1-rarely true, 2-sometimes true, 3-often true, 4-true nearly all the time, with higher scores reflecting greater resilience. The construct validity of the CD-RISC

measures at $\chi 2$ (35) = 176.10, p< .001, RMSEA= .050, 90% CI= .043-.057, CFit= 0.50, SRMR .028, CFI= .97, and determinacy= .93 and internal reliability is Cronbach α of 0.85 (Campbell-Sills & Stein, 2007). The completion of CD-RISC-25 will take approximately 10 minutes to complete. I obtained permission for use of the CD-RISC-25 from the CD-RISC website by emailing the administrator at mail@cd-risc.com (Appendix E).

Data Collection Technique

Based on the three previously validated instruments, I will utilize SurveyMonkey to collect data electronically from the participants in this research study. To collect, store, organize, and summarize the data collected through a web-based survey, the researcher will follow consistent processes. By using a web-based survey, participants will be able to complete the survey at their convenience without feeling rushed or under any pressure to complete the survey. Using SurveyMonkey as an Internet-based software application, the following steps will be followed in order to collect the study data. The first step will be to invite participants to participate in my study via social media sites- Facebook and LinkedIn. Following the link, participants will be able to access the study's purpose, eligibility, and informed consent. In the next step, participants will have access to questionnaires containing items from the previously validated tools, the MBI-HSS survey (Appendix A), McCain Intent to Stay Scale (Appendix C), and CR-RISCK (Appendix D). The questionnaires will be completed, and data obtained will be submitted to me through the SurveyMonkey website. The anonymous responses to the questionnaire will be

collected using SurveyMonkey. The survey responses of participants will not be linked to any identifiers. The data will be collected and organized using SurveyMonkey in a format that can be retrieved. The data will be downloaded into an Excel spreadsheet once the collection period has expired. I will provide the raw data upon request. To protect the file, I will set a password and store it in a locked cabinet for 5 years on a password protected USB flash drive.

Data Analysis

The research question is, "To what extent, if any, does resilience moderate the relationship between burnout and intent to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting?" The following hypotheses were developed between resilience, burnout, and intent to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting:

H0: Resilience does not moderate the relationship between burnout and intent to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting.

Ha: Resilience moderates the relationship between burnout and intent to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting.

It has been demonstrated that regression analysis effectively identifies how changes in an independent variable may affect a dependent variable. Ratelle et al. (2019) concluded that linear multiple regression analysis is the appropriate type of analysis when there is a linear relationship between interval or rational variables. This study will use

multiple linear regression, as the research question addressed one predictive variable, one dependent variable, and one moderating variable between resilience (Z), burnout (X), the interaction between resilience and burnout (Z*X), and the dependent variable intent to stay (Y). The predictive variable, dependent variable, and moderating variable in the regression model in this study are X, Z, X*Z, where Y is the dependent variable.

Semi-partial correlations, regression coefficients, and statistical significance are all methods by which researchers can analyze moderating variables. For the semi-partial correlation analysis, the third variable holds constant for either X or Y but not for both; therefore, it is not appropriate to use semi-partial correlation analysis. However, regression coefficients remain interval measures of magnitude and have limited generalizability across studies, regardless of whether they are standardized (Smith et al., 2020). In hierarchical multiple regression analysis, variables are introduced into the regression equation at various points in the process; this allows the researcher to measure the interaction effect between the variables. An analysis of multiple regression using a hierarchical approach will make use of an independent variable or variables (Coleman, 2018). An additional multiple regression analysis will then be conducted with a new set of independent variables based on the first independent variable or variables (Olsen et al., 2020). I will determine the contribution of the second set of independent variables by comparing the results of both regression analyses.

For this study, hierarchical multiple regression was the most appropriate method because I am interested in examining the moderating effects of resilience on the

relationship between burnout and intention to stay. I will run a multiple regression model with and without the uncentered interaction to determine how much variance is accounted for by the predictors. Then, I will examine both models for significance and see if the variance accounted for in the model with the interaction variable is statistically significant compared to the model without the interaction variable. There are only two possible values for the dependent variable in logistic regression (Timoneda, 2021). Because there are more than two possible answers to the dependent variable, logistic regression was unsuitable for this study.

Regression at the ordinal level is a statistical technique for predicting the behavior of dependent variables at the ordinal level with a set of independent variables (Zhang et al., 2022). An order response category variable is the dependent variable, while an independent variable may be categorical or continuous (Zheng et al., 2022). It is not possible to use simple r-square in ordinal regression, as it is not possible in simple linear regression. I cannot use r-square for data analysis since ordinal regression does not use r-square to determine the amount of variance explained by the independent variable.

The two-way analysis of variance and Pearson's correlation coefficient are other statistical analysis techniques for analyzing data. A two-way ANOVA examines the average deviations between groups. This technique consists of analyzing and evaluating the independent and cumulative effects of two variables on the outcome variable (Wilcox, 2022). Researchers can analyze the relationships between variables by using Pearson's correlation coefficient (Schober et al., 2018). In my study, neither two-way ANOVA or

Pearson's correlation coefficient is appropriate due to the interaction between variables and because the number of variables is restricted to two in Pearson's correlation coefficient.

Multiple linear regression model includes the following assumptions: types of variables, multicollinearity, independence of residuals, linearity, homoscedasticity, outliers, and normality. Multiple linear regression models are defined by the equation $Y=\beta0+\beta1X1+\beta2X2+\cdots+\beta pXp+\epsilon$ (Nørskov et al., 2021). By applying the method of least squares, I can estimate the parameters $\beta0,\ldots,\beta p$, based on the same principles as those of simple linear regression, which is applied to the dimension of p. Researchers' findings can be misled by assuming data purity. The multiple regression analysis must be tested by analysts when analyzing statistical data using multiple regression (Nørskov et al., 2021). First, there is the concept of multicollinearity (Kim, 2019). There is multicollinearity of data when the variables examined by the researcher have similar scopes or interrelate with each other (Kim, 2019). When there is a violation of the assumption of multicollinearity, the variance inflation factor can be used to test for multicollinearity (Bayman & Dexter, 2021). Homoscedasticity is the third assumption (Yang et al., 2019). In terms of homoscedasticity, it represents the difference between the data sets that have been observed and those that have been predicted (Yang et al., 2019). Homoscedasticity errors are typically detected by visual examination of scatterplots (Yang et al., 2019) and by using a method called weighted least squares (Choi et al., 2022). A normal distribution of data is another assumption (Nørskov et al., 2021). The term normal distribution is used

to refer to the assumption that the data in a sample population are distributed equally (Mishra et al., 2019). By using the Shapiro-Wilks test (S-W), I will determine whether the data collected will conform to normal distributions.

Finally, it is assumed that errors are independent of one another (Story & Tait, 2019). Independent errors can be detected when the distance between the data points and the regression line is unrelated (Story & Tait, 2019). To comply with my study's data requirements, I will account for statistical variance and identify methods for testing potential errors. In order to identify and remove inconsistencies from the data, researchers use data cleaning procedures (Gesicho et al., 2020). An outlier is an extreme response that falls outside the normal range (Lee et al., 2021). Inliers are data that are out of range of expectations but are incorrect due to the participant entering the incorrect value (Lee et al., 2021). As a result of listing detailed survey rules, I will be able to safeguard the validity of the data by ensuring participants are only provided with one option for each point on the Likert-scale for each question on the survey. Prior to submitting the survey, participants will complete all survey questions.

A survey submitted with no response to questions, a survey form that has been lost, or missing values for one or more questions could result in the absence of missing data (Lee et al., 2021). Using SurveyMonkey, I structured the questionnaire so that each question must be answered before participants can move on to the next. Researcher's conclusions may be inaccurate if missing responses are included in survey results. Data analysis will be conducted using descriptive statistics using SPSS Version 29. In order to

utilize SPSS, it will be necessary to assess the assumptions that will guide the data measurement and analysis (Mishra et al., 2019).

Probability values (p-values) and effect sizes are the two standard inferential statistics used in hypothesis testing and multiple regression analyses (Huber, 2019). I will interpret the results of my research using inferential statistics since I will be using multiple regression analysis to test hypothesis. Generally, a p-value ranges from 0 to 1, with 0 representing a low probability of rejecting the null hypothesis and 1 representing a high probability (Huber, 2019). Thus, I set my significance level at $p < .05$ so that I am able to reject or accept the null hypothesis. The effect size (f2) calculated from the number of respondents is another inferential statistic that must be considered by a researcher (Liu & Yuan, 2021). Researchers can infer conclusions from the data or identify the need for a larger sample using the effect size, which represents small, medium, or large variation among the means based on the data (Liu & Yuan, 2021). My study will examine the relationship between each variable, therefore a medium effect size of .15 will be appropriate.

Study Validity

In order to protect against possible credibility threats and validity threats, researchers examine the study's internal and external validity. It is important to note that internal validity is the degree of accuracy with which the study measures its intended outcomes. A correlational study uses statistical methods for data analysis, while also removing outliers by implementing data cleaning processes; thus, the notion of internal

validity does not pertain to this type of study (Fabrigar et al., 2020). It is imperative that the external validity of any study be replicated and generalized (Fabrigar et al., 2020). A study's validity can be reduced if researchers overlook statistical conclusion threats. It is the ability of a researcher to correctly interpret the statistics of a study to identify relationships and correlations between variables that is referred to as statistical conclusion validity (Alghadir et al., 2018; Fox et al., 2020).

External Validity

A researcher should be aware of several threats that could undermine the external validity of a statistical conclusion. When researchers attempt to integrate or generalize study results with the general population, external validity is the primary consideration (Bielenia-Grajewska, 2018). Several elements of external validity are important in determining the validity of a study, including the sample population and time validity (Fox et al., 2020). A population's validity refers to the ability to draw inferences from a study of that particular population (Fox et al., 2020). As an example, the research question for this study will examine whether a relationship exists between two or more variables in the sample of interest. When biases or other constraints appear within the accessible population, the validity of the study is severely compromised (Lange & Dewitte, 2021). An insufficient sample size or an unrepresentative sample may result in useless estimates, as the sample may not accurately reflect the entire population (Lange & Dewitte, 2021). Generalizations should not be made in such circumstances. Using the G*Power software to calculate a sample size necessary for this study will ensure that the

sample size is appropriate, and generalizations can be made to larger populations. It is important to note that environmental validity refers to the ability of a study to generalize its findings to other environments (Lange & Dewitte, 2021). There is a possible problem of generalizability on an international scale. It is likely that such research will have limited environmental validity since this study is limited to nursing professionals employed in United States and may not apply to other countries.

Internal Validity

Study validity is also threatened by internal validity. A study's internal validity is determined by its effectiveness in identifying relationships between constructs (Slocum et al., 2022). In order to ensure the internal validity of a study, researchers must take into account factors such as maturation, history, attrition of subjects, instrumentation, regression toward the mean, selection, and compensation (Halili, 2021). In quantitative studies, measures to mitigate threats to internal validity include limiting the number of times participants may take the survey, reinforcing the completion of the survey, ensuring that all respondents take the same survey, and promoting the completion of the survey on an individual basis (Halili, 2021). In order to reduce the internal threat for my study, I will allow participants only one-time access to the survey and will communicate that only completed surveys will be collected.

Statistical Conclusion Validity

Statistical errors of type I and type II are a byproduct of the researcher's sample size (Mascha & Vetter, 2018). There can be Type I and Type II probability errors when

there are too few or too many participants in a study. In Type I and Type II errors, the results are contradictory to actual correlations between variables (Mascha & Vetter, 2018). It is generally accepted that Type I and Type II statistical errors are caused by an insufficient number of participants or an excessive number of participants (Mascha & Vetter, 2018). When the null hypothesis does not exhibit a significant difference from the alternative hypothesis due to Type I or Type II statistical errors, the study is no longer relevant (Fabrigar et al., 2020).

To reduce common Type I and Type II statistical errors, it is essential to obtain the appropriate sample size for a study (Fabrigar et al., 2020). Using the G*Power software to determine the appropriate sample size will address the threats to external validity, various statistical errors, and promote the study's relevance and significance. In addition, the instrument used to collect data may present a second threat. The measurement of results must be consistent in order for a data collection instrument to be considered reliable (Tourunen et al., 2021). Furthermore, test-retest correlation reliability scores range from 0-1, where a score of 0 indicates the presence of errors, while a score of 1 indicates the absence of errors (Alghadir et al., 2018). The data collection instruments used to capture the independent variables of resilience and burnout are the MBI-GS and McCain's Intent to Stay scale and the Connor-Davidson Resilience Scale for the dependent variable of intent to stay. Psychometric aspects of the Maslach Burnout Inventory, reliability for internal consistency was reported with the test-retest reliability being high and statistically significant at $p < 0.0001$ at Cronbach's alpha coefficient

values of 0.858, 0.910, and 0.890 (Wickramasinghe et al., 2018). Based on the study by Tourunen et al. (2021), the internal consistency of the CD-RISC10 was good (Cronbach's $\alpha = 0.85$), test-retest reliability moderate (ICC = 0.61), and the scale was unidimensional. McCain Intent to Stay scale was reported to have a Cronbach's alpha of 0.88 by Mueller and McCloskey (1990). It is reported that the tool has both face validity and content validity (Mueller & McCloskey, 1990). The instrument's reliability will be assured by adhering to its original format and limiting any modifications to the questionnaire.

Achieving Generalizability

To determine the generalizability of a study, it is essential to consider the characteristics and length of the study, as well as the incentives and compliance measures that will be implemented for participants to comply with the study (Tessler & Goodman, 2019). Upon completion of the study, there will be a relationship between the study and the population in terms of the characteristics of the sample and the population. Among the steps researchers can take to ensure external validity include ensuring that the sample population reflects the target population, comparing the results of current studies with the results of published studies with different populations, and clearly stating the researcher's scope, methodology, and design of the study (Fabrigar et al., 2020; Fox et al., 2020). The generalization of this study's results to the larger target population will be justified due to the inclusion of the target population in the study's sample population, as well as the reliability of the instrumentation for data collection, and the detailed description of the study's objectives.

Transition and Summary

A summary of the research project is provided in section 2 of this study. There are various components of a research project that have been identified and deliberated. The purpose of this study is to investigate resilience as a moderating factor on the relationship between burnout and intent to stay of licensed registered nurses with BSN degrees working with adults in a hospital setting. I will gain access to participants using social media networks such as LinkedIn and Facebook and ensure their anonymity and input. The research design for this study is quantitative correlational and a sample size between 73 to 77 participants will be necessary for this study. The data will be collected using SurveyMonkey application that will include questions from MBI, McCain Intent to Stay Scale, and CR-RISC scale. The use of multiple regression analysis for data was justified based on the hypotheses. An overview of the study's findings, implications for social change, and recommendations for business practices will be presented in Section 3.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The purpose of this quantitative correlational study was to investigate resilience as a moderating factor in the relationship between burnout and intention to stay of licensed registered nurses with BSN degrees working with adults in a hospital setting. This study used multiple linear regression, as the research question addressed one predictive variable (burnout), one moderating variable (resilience), and one dependent variable (intent to stay). The model as a whole (see Table 1) significantly predicted intent to stay in nursing professionals with BSN degrees working with adult patients in a hospital setting in the United States of America, $F(2,79) = 79.462$, $p < .001$, $R2=.665$. The R2 value of .665 indicates that 66.5% of variance in intent to stay is accounted for by the linear combination of the predicator variable (burnout) and the moderating variable (resilience), as well as the interaction between the moderating and independent variable. In the final model, the moderating variable of resilience had statistically significant impact and was shown to be a predictor on the relationship between burnout and intent to ($t = 12.503$, $p < .05$), but the independent variable of burnout did not have significant impact on the dependent variable of intent to stay ($t = .328$, $p >.05$).

Presentation of the Findings

A summary of my findings is provided in this section, which reviews and discusses testing the assumptions, provides descriptive statistics on the predictors and dependent variables, and concludes by summarizing my findings.

Tests of Assumptions

The multiple linear regression model includes the following assumptions: types of variables, multicollinearity, independence of residuals, linearity, homoscedasticity, outliers, and normality.

Types of Variables

It is essential to validate moderating, dependent, and independent variables to ensure that the research is reliable and accurate. Validating independent and moderating variables involves ensuring that they are relevant and significant to the research. I conducted a literature review to identify the moderating and independent variables that are used in this study. The variables were assessed based on their relevance and significance to the research question. Moreover, I ensured that the variables were measurable. I validated that the burnout (predictor) variable, resilience (moderator), and intent to stay (dependent) variables were all interval types of measurement. Also, all variables were measured using reliable and valid instruments. Moreover, the dependent variable was relevant to the research question and accurately reflected the concept I was measuring.

Multicollinearity

Multicollinearity can lead to misleading regression coefficients, making it difficult to interpret the results of the regression analysis; it can also reduce the predictive power of the model and make it challenging to identify which independent variable has a

significant impact on the dependent variable (Kim, 2019). One approach is to calculate the correlation matrix of the independent variables and check for the presence of high correlations. If the moderating and independent variables have a correlation coefficient of 0.7 or higher, then it indicates the presence of multicollinearity (Kim, 2019). For this study, the correlation coefficient was 0.674. Another approach that I used was the variance inflation factor (VIF) to identify the extent of multicollinearity. VIF measures the extent to which the variance of the estimated regression coefficient is increased due to multicollinearity. If the VIF value is greater than 10, it indicates a high level of multicollinearity. The VIF for the resilience, burnout, and intent to stay in this study were 3.062, 1.012, 3.064, respectively (See Table 1). This indicated that the assumption of multicollinearity was not violated.

Table 1

Coefficients Resilience, Burnout, Intent to Stay

Model	Collinearity Statistics	
	Tolerance	VIF
Constant		
MBI Score (Burnout)	0.988	1.012
CD-RS Score (Resilience)	0.327	3.062
McCain Score (Intent to stay)	0.326	3.064

Independence of Residuals

One way to assess the independence of residuals is by using the Durbin-Watson statistic. The Durbin-Watson statistics measures the autocorrelation of the residuals, which is the correlation between the current residual and the previous residual (Van Dusen & Nissen, 2019). If the Durbin-Watson statistic is less than the lower critical value, there is positive autocorrelation in the residuals, indicating that the residuals are not independent (Van Dusen & Nissen, 2019). If the Durbin-Watson statistic is greater than the upper critical value, there is negative autocorrelation in the residuals, indicating that the residuals are not independent (Van Dusen & Nissen, 2019). If the Durbin-Watson statistic is between the critical values, there is no evidence of autocorrelation in the residuals, and they can be considered independent (Van Dusen & Nissen, 2019). The calculated Durbin-Watson statistic for this study was 1.811, which is fairly close to 2, which demonstrates the independence of residuals (see Table 3).

Linearity, Homoscedasticity, Outliers

Upon examination of the scatterplot of the residuals (See Figure 3) to assess linearity, homoscedasticity, and outliers, my examination revealed no significant violations of these assumptions. As shown in Figure 4, the normal probability plot (P-P plot) was utilized to assess the validity of the normality distribution of errors assumption. A fairly straight line between the lowest and highest points indicates that the assumption of normality is not violated.

Figure 3

Scatterplot of the Residuals

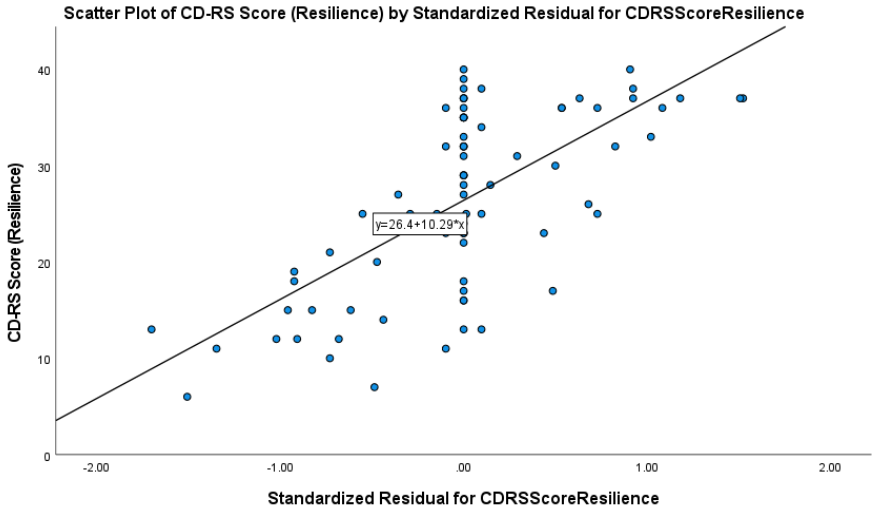


Figure 4

Normal Probability Plot 1

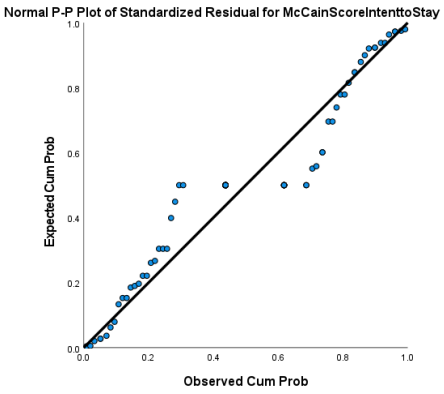
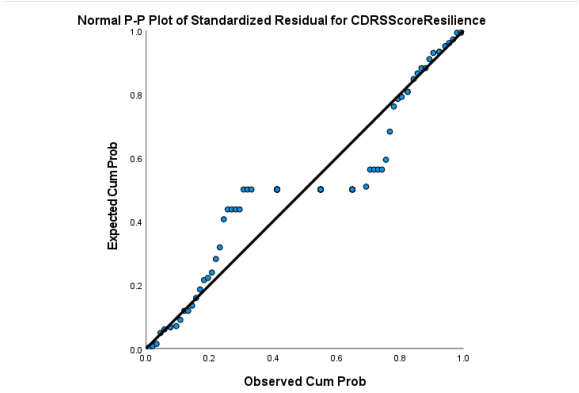


Figure 5

Normal Probability Plot 2



Normality

Hierarchical multiple regression was used because I was interested in examining the moderating effects of resilience on the relationship between burnout and intention to remain. I ran a multiple regression model with and without the uncentered interaction to determine how much variance was accounted for by the predictors. Then, I examined both models for significance and checked if the variance accounted for in the model with the interaction variable was statistically significant compared to the model without the interaction variable. By performing this analysis, I found that the residuals were normally distributed with a mean of zero, and the observed residuals provided an indication that the distribution was approximately symmetric and bell-shaped.

Descriptive Statistics

A total of 90 participants accepted the invitation to complete the online survey. Out of the 90 participants, 10 participants did not meet the eligibility criteria. The remaining 80 participants were licensed registered nurses with BSN degrees working with adult patient population in the United States. Table 2 includes descriptive statistics for the study variables.

Table 2

Descriptive Statistics

Variable	*M*	*SD*
MBI Score (Burnout)	86.31	22.03
CD-RS Score (Resilience)	26.40	9.45
McCain Score (Intent to Stay)	18.11	5.91

Inferential Statistics

Standard multiple regression with $\alpha = .05$ (two-tailed test) was used to examine the extent, if any, that resilience moderates the relationship between burnout and intent to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting. The dependent variable was intent to stay. The null hypothesis was that resilience does not moderate the relationship between burnout and intent to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting. As part of

the data analysis, I assessed the assumptions of types of variables, multicollinearity, independence of residuals, linearity, homoscedasticity, outliers, and normality.

The model (see Table 3) significantly predicted intent to stay in nursing professionals with BSN degrees working with adult patients in a hospital setting in the United States of America, $F(2,79) = 79.462$, $p < .001$, $R^2 = .665$. The R^2 value of .665 indicates that approximately 66.5% of variance in intent to stay is accounted for by the linear combination of the predicator variable (burnout) and the moderating variable (resilience), as well as the interaction between the moderating and independent variable. In the final model, burnout was not a significant contributor ($t = .328$, $p > .05$), but resilience was a statistically significant predictor of the intent to stay ($t = 12.503$, $p < .05$). The moderating variable of resilience represented by slope of 0.51, represents a 0.51 increase in intent to stay for a one-unit change in the resilience, while all other variables remain constant. The predictor (independent) variable of burnout has a slope of .03, which represents a .03 increase in intent to stay for a one-unit change in burnout, while all other variables remain constant. Table 4 presents a summary of linear regression of the variables in this study.

Table 3

Model Summary

				Change Statistics

Model	R	R^2	Adj. R^2	Std. error estimate	R^2 change	F change	df1	df2	Sig. F change	Durbin-Watson
1	.821	.674	.665	3.42	.674	79.46	2	79	.000	1.811

Table 4

Summary of Linear Regression of Study Variables

Model	B	*Beta*	*T*	*p*	95% CI for *B*
Resilience	.511	.818	12.503	.000	[.593, .992]
Burnout	.006	.021	.328	.744	[-.029, .041]
Interaction	4.116		2.275	.026	[.514, 7.718]

Analysis Summary

The purpose of this quantitative correlational study was to examine the extent, if any, resilience moderates the relationship between burnout and intent to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting. As part of the data analysis, I assessed the assumptions of types of variables, multicollinearity, independence of residuals, linearity, homoscedasticity, outliers, and normality. I did not observe any violations in any of the assumptions.

The model significantly predicted intent to stay in nursing professionals with BSN degrees working with adult patients in a hospital setting in the United States of America, $F(2,79) = 79.462$, $p < .001$, $R2=.665$. Based on the results of the statistical analysis using multiple linear regression model, the p-value for independent variable of burnout was .744; this indicates that burnout was not a significant contributor to the intent to stay in nursing professional because the probability value for burnout variable was more than .05. However, the p-value for the moderator variable of resilience was .000, this indicated that resilience has significant contribution to intent to stay for nursing professionals. The probability value of the interaction between resilience and burnout on intent to stay was $p = .026$, which is less than $p = .05$. This means that the null hypothesis was rejected, and that resilience moderates the relationship between burnout and intent to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting.

Theoretical Discussion of Findings

This study was guided by the SCCT which states that individuals strive for success by meeting their self-efficacy expectations and outcomes expectations, especially when the goals are clear, specific, and supported by others (Lent et al., 1994). In light of this, performance attainment assessment using a variety of tools and instruments can provide valuable information on whether an employee has strong or weak self-efficacy and resilience, as well as outcome expectations that organizational leaders may use to help employees revise or confirm their choices and prevent turnover (Lent et al., 1994). Using the SCCT as the basis of this study, resilience as a moderator of the relationship

between burnout and intention to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting was examined. The SCCT provided a comprehensive explanation of career decisions (Lent et al., 1994).

In this study, SCCT was used to model career decisions among practicing nurses to understand the relationship between burnout and intent to leave or remain in nursing. In the SCCT, self-efficacy is defined as an individual's belief that they are capable of completing a task, responding to burnout, and maintaining a sense of resilience (Lent & Brown, 2019; Lent et al., 1994). This study extends the knowledge of the SCCT theory regarding resilience, burnout, and intent to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting in my study. The SCCT theory suggests that resilience and intent to stay are related in this study. Based on the findings of my study, I extended the SCCT theory by demonstrating that a strong sense of resilience moderates the relationship between burnout and intention to stay of registered nurses with BSN degrees working with adults in a hospital setting.

Applications to Professional Practice

The COVID-19 pandemic increased stress and burnout among nurses, physicians, and first responders (Rivas et al., 2021; Sklar et al., 2021). Nursing burnout has been a problem for healthcare providers since before the COVID-19 pandemic; however, it has been reported that nurse burnout has been greater during the pandemic (Shah et al., 2021). The leaders of healthcare organizations must ensure that high-quality patient care is provided by direct healthcare providers in order to maximize profits (Tarro et al.,

2020). Among licensed registered nurses with BSN degrees working with adults in a hospital setting, the study findings provide insight into the relationship between resilience, burnout rates, and intention to stay employed as direct healthcare providers. It will be possible for organizational leaders to prevent direct healthcare providers' burnout by implementing significant interventions to predict resilience, burnout, and intention to stay in the organization. This will result in high-quality healthcare for patients and greater profitability for the healthcare facility. Resilience and burnout are two important concepts that are intertwined with mental health and well-being. Stress can be better coped with, and burnout can be avoided by prioritizing self-care and developing resilience.

It is important to note that the results of this study are good indicators that a healthcare organization promoting resilience among licensed registered nurses working in a hospital setting may be able to improve patient outcomes and decrease mortality rates by improving patient health outcomes. Nurses are essential for providing quality healthcare to patients, but they are often subject to high levels of stress and fatigue (Kelly et al., 2021; Sullivan et al., 2022). Increasing resilience in nurses is important for maintaining their health and wellbeing, as well as for ensuring that they are able to provide the best possible care. It is possible that licensed registered nurses with BSN degrees working with adults in a hospital setting could have better relationships with their patients because decreased burnout may result in less stress for the nursing staff. Additionally, this study will address gaps in the knowledge of resilience as a moderating factor when it comes to the relationship between burnout and intent to stay in licensed

registered nurses with BSN degrees working with adults in a hospital setting. Through the results of this study, nursing professionals can be encouraged to be resilient and reduce factors contributing to burnout, thereby improving their personal relationships, and preventing staff shortages. Improving the overall quality of patient care, improving patient outcomes, and reducing healthcare disparities among diverse patient populations may be seen by improving nurses' personal relationships and decreasing staff shortages.

Implications for Social Change

The nursing profession is a demanding one that requires a high degree of mental, physical, and emotional resilience. There is a high level of stress experienced by nurses, long working hours, and emotional trauma, which can contribute to burnout. A state of burnout occurs when a person becomes emotionally, physically, and mentally exhausted as a result of chronic stress. In contrast, resilience refers to an individual's ability to adapt and recover from stressful situations. Providing quality care to patients requires nurses to possess this characteristic in order to avoid burnout and maintain job satisfaction.

The implications of these studies for social change are significant. As a result of burnout, nurses are more likely to want to leave their jobs and be dissatisfied with their jobs, which can negatively impact patients' health. To improve patient outcomes, healthcare organizations can promote resilience in nurses, resulting in a reduction in burnout levels and an increase in job satisfaction. Supporting the mental health and well-being of nurses can also contribute to social change. A healthy work-life balance can be promoted by providing resources for stress management, offering counseling services,

and offering stress management resources. Thus, it is imperative to study resilience and burnout in nurses to understand its impact on the social change in the healthcare industry. It is possible to enhance job satisfaction and patient outcomes by promoting resilience and providing support for nurses' mental health and well-being.

Recommendations for Action

This study indicated that resilience moderates the relationship between burnout and intent to stay in licensed registered nurses with BSN degrees working with adults in a hospital setting. I recommend for healthcare organizations to invest in further research aiming to develop resources for stress management that would include encouraging a healthy work-life balance, fostering a supportive work environment, addressing administrative burdens, promoting self-care, and improving communication between healthcare organizational leaders and providers.

Disseminating the results of a research study is an important step in the research process. It allows researchers to share their findings with others in the scientific community and beyond, increasing the impact of their work. I intend to continue researching the potential impact of resilience on burnout among various healthcare providers in various healthcare organizational settings. In addition, I plan to present my research at professional conferences and publish my work in peer-reviewed journals as well as the ProQuest dissertation database.

Recommendations for Further Research

First, a key limitation was the use of self-reported data. Data reflected the direct patient healthcare provider's perception of resilience, burnout, and intent to stay, which may be distorted or incomplete. Some direct patient healthcare providers may not have understood the subject properly. A second limitation was time constraints on the part of healthcare workers. Due to high patient volume, direct patient healthcare providers may have limited time to provide the necessary survey data.

I conducted a survey to examine the moderating effect of resilience on the relationship between burnout and the intention to stay in the workforce of licensed registered nurses with BSN degrees working with adults in a hospital setting. Due to the convenience sampling technique, I am limited in generalizing the results to only the population sample - using convenience sampling reduces the possibility of generalizing the results (see Andrade, 2021). To examine whether resilience has a moderating effect on the relationship between burnout and intention to remain in the profession of nursing working with adults in a hospital setting, I recommend conducting mixed-method study. By applying a mixed-method approach to examine the moderating effect of resilience on burnout and intentions to stay, the researcher will be able to integrate qualitative research and qualitative data conceptually and analytically with traditional epidemiological and quantitative research methods to facilitate the translation of findings.

Reflections

Working in a hospital setting with numerous healthcare providers has made me aware of the large number of staff members that have left the medical field due to burnout from working long hours and providing high quality patient care to numerous patients. Healthcare providers are particularly susceptible to burnout because of the high-pressure nature of their work. Providers who experienced burnout were more likely to make errors, provide lower quality care, and have reduced patient satisfaction. I also witnessed how burnout led to high turnover rates among healthcare providers, which caused disruptions in patient care and increased costs for healthcare organizations. At that time, I realized that I wanted to study the impact that burnout has on healthcare providers and organizations. I focused on creating a study where my personal bias would not interfere, thus collecting the data using an anonymous online survey and performing data analysis on the raw data helped me to address my research question.

Taking DBA and Healthcare administration courses throughout the years has had its ups and downs. I am very grateful to Dr. Andrews, Dr. Walker, and other committee members for all their encouragement and feedback that stopped me from quitting this program at least once a month for the last 3 years.

Conclusion

Burnout leads to a feeling of physical exhaustion, mental exhaustion, and emotional exhaustion in nurses. There has been a link between burnout among nursing professionals and the intention to leave their organizations (Chang et al., 2019). Nursing

leaders lack the understanding of resilience as a moderating factor in the relationship between burnout and the intention to stay of licensed registered nurses with Bachelor of Science in Nursing (BSN) degrees working with adults in a hospital setting.

Using the findings of my study, I extended the SCCT theory by demonstrating that strong resilience moderates the relationship between burnout and intention to stay among registered nurses with BSNs working in hospitals with adults. According to the findings of this study, resilience moderates the relationship between burnout and intent to stay in the workplace among licensed registered nurses with BSN degrees working with adults in a hospital setting. This study is significant in that if a healthcare organization promotes resilience in licensed registered nurses with BSN degrees working in a hospital setting, they may be able to improve the overall patient experience, leading to an improved patient health outcome and a reduction in mortality rates.

References

Abram, M. D., & Jacobowitz, W. (2021). Resilience and burnout in healthcare students and inpatient psychiatric nurses: A between-groups study of two populations. *Archives of Psychiatric Nursing*, *35*(1), 1–8. https://doi.org/10.1016/j.apnu.2020.10.008

Adiguzel, Z. (2019). Relationships among leader effectiveness, learning orientation, effective communication, team creativity, and service innovation in the service sector. *Business & Economics Research Journal*, *10*(1), 131–148. https://doi.org/10.20409/berj.2019.159

Agarwal, S. D., Pabo, E., Rozenblum, R., & Sherritt, K. M. (2020). Professional dissonance and burnout in primary care: A qualitative study. *JAMA Internal Medicine*, *180*(3), 395–401. https://doi.org/10.1001/jamainternmed.2019.6326

Al Yahyaei, A., Hewison, A., Efstathiou, N., & Carrick-Sen, D. (2022). Nurses' intention to stay in the work environment in acute healthcare: a systematic review. *Journal of Research in Nursing: JRN*, *27*(4), 374–397. https://doi.org/10.1177/17449871221080731

Alghadir, A. H., Anwer, S., Iqbal, A., & Iqbal, Z. A. (2018). Test-retest reliability, validity, and minimum detectable change of visual analog, numerical rating, and verbal rating scales for measurement of osteoarthritic knee pain. *Journal of Pain Research*, *11*, 851–856. https://doi.org/10.2147/JPR.S158847

Andrade C. (2021). The inconvenient truth about convenience and purposive

samples. *Indian Journal of Psychological Medicine*, *43*(1), 86–88. https://doi.org/10.1177/0253717620977000

Aronsson, G., Theorell, T., Grape, T., Hammarström, A., Hogstedt, C., Marteinsdottir, I., Skoog, I., Träskman-Bendz, L., & Hall, C. (2017). A systematic review including meta-analysis of work environment and burnout symptoms. *BMC Public Health*, *17*(1), 264. https://doi.org/10.1186/s12889-017-4153-7

Artal, R., & Rubenfeld, S. (2017). Ethical issues in research. Best practice & research. *Clinical Obstetrics & Gynecology*, *43*, 107–114. https://doi.org/10.1016/j.bpobgyn.2016.12.006

Bakker, A. B., & de Vries, J. D. (2021). Job demands-resources theory and self-regulation: New explanations and remedies for job burnout. *Anxiety, Stress, and Coping*, *34*(1), 1–21. https://doi.org/10.1080/10615806.2020.1797695

Bandura, A. (1976). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215. https://doi.org/10.1037/0033-295X.84.2.1914

Bandura, A. (1986). *Social foundations of through and action: A social cognitive theory.* Prentice Hall.

Barello, S., Palamenghi, L., & Graffigna, G. (2020). Burnout and somatic symptoms among frontline healthcare professionals at the peak of the Italian COVID-19 pandemic. *Psychiatry Research*, *290*, 113129. https://doi.org/10.1016/j.psychres.2020.113129

Bayman, E. O., & Dexter, F. (2021). Multicollinearity in logistic regression

models. *Anesthesia and Analgesia*, *133*(2), 362–365. https://doi.org/10.1213/ANE.0000000000005593

Benedetti, B., Caponigro, V., & Ardini, F. (2022). Experimental design step by step: A practical guide for beginners. *Critical Reviews in Analytical Chemistry*, *52*(5), 1015–1028. https://doi.org/10.1080/10408347.2020.1848517

Bielenia-Grajewska, M. (2018). Threats to research validity. *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation, 1-4.* https://dx.doi.org/10.4135/9781506326139

Bloomfield, J., & Fisher, M. (2019). Quantitative research design. *Journal of the Australasian Rehabilitation Nurses' Association, 22*. 27-30. https://doi.org/10.33235/jarna.22.2.27-30.

Brady, K., Ni, P., Sheldrick, R. C., Trockel, M. T., Shanafelt, T. D., Rowe, S. G., Schneider, J. I., & Kazis, L. E. (2020). Describing the emotional exhaustion, depersonalization, and low personal accomplishment symptoms associated with Maslach Burnout Inventory subscale scores in US physicians: an item response theory analysis. *Journal of Patient-Reported Outcomes*, *4*(1), 42. https://doi.org/10.1186/s41687-020-00204-x

Brewer, E., & Kubn, J. (2010). *Causal-comparative design*. Encyclopedia of Research Design. SAGE Publications, Inc.

Broche-Pérez, Y., Fernández-Fleites, Z., Jiménez-Puig, E., Fernández-Castillo, E., & Rodríguez-Martin, B. C. (2022). Gender and Fear of COVID-19 in a Cuban

population sample. *International Journal of Mental Health and Addiction, 20*(1), 83–91. https://doi.org/10.1007/s11469-020-00343-8

Byiers, B. J., Pennington, B., Rudolph, B. N., & Ford, A. L. (2020). Perspectives on the use of quantitative analysis in single-case experimental research. *Journal of Behavioral Education, 30,* 444-454. https://doi.org/10.1007/s10864-020-09386

Çam, O. (2017). Nurses' resilience and effective factors. *Journal of Psychiatric Nursing*, *8*(2), 118–126. https://doi.org/10.14744/PHD.2017.75436

Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, *25*(8), 652–661. https://doi.org/10.1177/1744987120927206

Campbell-Sills, L., & Stein, M. B. (2007). Psychometric analysis and refinement of the Connor-Davidson Resilience Scale (CD-RISC): Validation of a 10-item measure of resilience. *Journal of Traumatic Stress*, *20*(6), 1019–1028. https://doi.org/10.1002/jts.20271

Capper, T., Brown, J., Donovan, H., Hegney, D., Williamson, M., Cusack, L., Solomons, T., & Wilson, S. (2020). Individual and environmental factors that influence longevity of newcomers to nursing and midwifery: A scoping review protocol. *JBI Evidence Synthesis*, *18*(6), 1271–1277. https://doi.org/10.11124/JBIES-20-00003

Chang, H. Y., Friesner, D., Chu, T. L., Huang, T. L., Liao, Y. N., & Teng, C. I. (2019).

The impact of burnout on self-efficacy, outcome expectations, career interest and nurse turnover. *Journal of Advanced Nursing*, *74*(11), 2555–2565. https://doi.org/10.1111/jan.13776

Chen, Y. C., Guo, Y. L., Chin, W. S., Cheng, N. Y., Ho, J. J., & Shiao, J. S. (2019). Patient-Nurse ratio is related to nurses' intention to leave their job through mediating factors of burnout and job dissatisfaction. *International Journal of Environmental Research and Public Health, 16*(23), 4801-4807. https://doi.org/10.3390/ijerph16234801

Chen, R., Sun, C., Chen, J. J., Jen, H. J., Kang, X. L., Kao, C. C., & Chou, K. R. (2021). A large-scale survey on trauma, burnout, and posttraumatic growth among nurses during the COVID-19 Pandemic. *International Journal of Mental Health Nursing*, *30*(1), 102–116. https://doi.org/10.1111/inm.12796

Choi, S., Choi, T., Cho, H., & Bandyopadhyay, D. (2022). Weighted least-squares regression with competing risks data. *Statistics in Medicine*, *41*(2), 227–241. https://doi.org/10.1002/sim.9232

Coker, D. C. (2022). A Thematic analysis of the structure of delimitations in the dissertation. *International Journal of Doctoral Studies, 17,* 141–159. https://doi.org/10.28945/4939

Coleman, J. S. M. (2018). Descriptive statistics. In B. Frey (Ed.), *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation* (pp. 488-489). SAGE 88 Publications. https://doi.org/10.4135/9781506326139.n194

Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). Depression and anxiety, 18(2), 76-82.

Cope, L. C., Tully, M. P., & Hall, J. (2020). An exploration of the perceptions of non-medical prescribers, regarding their self-efficacy when prescribing, and their willingness to take responsibility for prescribing decisions. *Research in Social & Administrative Pharmacy: RSAP, 16*(2), 249–256. https://doi.org/10.1016/j.sapharm.2019.05.013

Creswell, J. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). SAGE.

Cristancho, S. M., Goldszmidt, M., Lingard, L., & Watling, C. (2018). Qualitative research essentials for medical education. *Singapore Medical Journal*, *59*(12), 622–627. https://doi.org/10.11622/smedj.2018093

Curtis, E. A., Comiskey, C., & Dempsey, O. (2016). Importance and use of correlational research. *Nurse Researcher*, *23*(6), 20–25. https://doi.org/10.7748/nr.2016.e1382

De Hert S. (2020). Burnout in healthcare workers: Prevalence, impact, and preventative strategies. *Local and Regional Anesthesia*, *13*, 171–183. https://doi.org/10.2147/LRA.S240564

Deng, G., Huang, C., Cheung, S. P., & Zhang, C. (2021). Job demands and resources, burnout, and psychological distress of employees in the Chinese non-profit sector. *Frontiers in Psychiatry*, *12*, 790064.

https://doi.org/10.3389/fpsyt.2021.790064

Denning, M., Goh, E. T., Tan, B., Kanneganti, A., Almonte, M., Scott, A., Martin, G., Clarke, J., Sounderajah, V., Markar, S., Przybylowicz, J., Chan, Y. H., Sia, C. H., Chua, Y. X., Sim, K., Lim, L., Tan, L., Tan, M., Sharma, V., Ooi, S., … Kinross, J. (2021). Determinants of burnout and other aspects of psychological well-being in healthcare workers during the Covid-19 pandemic: A multinational cross-sectional study. *PloS One*, *16*(4), e0238666. https://doi.org/10.1371/journal.pone.0238666

Di Trani, M., Mariani, R., Ferri, R., De Berardinis, D., & Frigo, M. G. (2021). From resilience to burnout in healthcare workers during the COVID-19 emergency: The role of the ability to tolerate uncertainty. *Frontiers in Psychology, 12*, 646435-646438. https://doi.org/10.3389/fpsyg.2021.646435

Dos Santos L. M. (2020). Stress, burnout, and low self-efficacy of nursing professionals: A qualitative inquiry. *Healthcare (Basel, Switzerland)*, *8*(4), 424-430. https://doi.org/10.3390/healthcare8040424

Duckworth, A. L., & Gross, J. J. (2020). Behavior Change. *Organizational behavior and human decision processes, 161*(Suppl), 39–49. https://doi.org/10.1016/j.obhdp.2020.09.002

Edwards, D. L., & Wilkerson, N. D. (2020). Emotional exhaustion and its relationship with suicide risk in emergency responders. *Psychiatry Research*, *293*, 113379. https://doi.org/10.1016/j.psychres.2020.113379

Eller, L. S., Lev, E. L., Yuan, C., & Watkins, A. V. (2018). Describing self-care self-efficacy: definition, measurement, outcomes, and implications. *International Journal of Nursing Knowledge, 29*(1), 38–48. https://doi.org/10.1111/2047-3095.12143

Evanoff, B. A., Strickland, J. R., Dale, A. M., Hayibor, L., Page, E., Duncan, J. G., Kannampallil, T., & Gray, D. L. (2020). Work-related and personal factors associated with mental well-being during the COVID-19 response: Survey of health care and other workers. *Journal of Medical Internet Research*, *22*(8), e21366-e21372. https://doi.org/10.2196/21366

Fabrigar, L. R., Wegener, D. T., & Petty, R. E. (2020). A validity-based framework for understanding replication in psychology. *Personality and Social Psychology Review, 24*(4), 316–344. https://doi.org/10.1177/1088868320931366

Feder, A., Murrough, J. W., Charney, D., Southwick, S. M., Ripp, J., Peccoralo, L., & Pietrzak, R. H. (2021). Moral distress in frontline healthcare workers in the initial epicenter of the COVID-19 pandemic in the United States: Relationship to PTSD symptoms, burnout, and psychosocial functioning. *Depression and Anxiety, 38*(10), 1007–1017. https://doi.org/10.1002/da.23205

Ferreira, P. & Gomes, S. (2021). The role of resilience in reducing burnout: A study with healthcare workers during the COVID-19 pandemic. *Social Science, 10*(9), 317-320. https://doi.org/10.3390/socsci10090317

Fiabane, E., Dordoni, P., Setti, I., Cacciatori, I., Grossi, C., Pistarini, C., & Argentero, P.

(2019). Emotional dissonance and exhaustion among healthcare professionals: the role of the perceived quality of care. *International Journal of Occupational Medicine and Environmental Health*, *32*(6), 841–851. https://doi.org/10.13075/ijomeh.1896.01388

Frey, B. (2018). *The SAGE encyclopedia of educational research, measurement, and evaluation*. SAGE. https://dx.doi.org/10.4135/9781506326139

Feder, A., Murrough, J. W., Charney, D., Southwick, S. M., Ripp, J., Peccoralo, L., & Pietrzak, R. H. (2021). Moral distress in frontline healthcare workers in the initial epicenter of the COVID-19 pandemic in the United States: Relationship to PTSD symptoms, burnout, and psychosocial functioning. *Depression and Anxiety*, *38*(10), 1007–1017. https://doi.org/10.1002/da.23205

Fox, M. P., Lash, T. L., & Bodnar, L. M. (2020). Common misconceptions about validation studies. *International Journal of Epidemiology*, *49*(4), 1392–1396. https://doi.org/10.1093/ije/dyaa090

Galanis, P., Vraka, I., Fragkou, D., Bilali, A., & Kaitelidou, D. (2021). Nurses' burnout and associated risk factors during the COVID-19 pandemic: A systematic review and meta-analysis. *Journal of Advanced Nursing*, *77*(8), 3286–3302. https://doi.org/10.1111/jan.14839

Gensimore, M. M., Maduro, R. S., Morgan, M. K., McGee, G. W., & Zimbro, K. S. (2020). The effect of nurse practice environment on retention and quality of care via burnout, work characteristics, and resilience: A moderated mediation

model. *The Journal of Nursing Administration*, *50*(10), 546–553. https://doi.org/10.1097/NNA.0000000000000932

Gesicho, M. B., Were, M. C., & Babic, A. (2020). Data cleaning process for HIV-indicator data extracted from DHIS2 national reporting system: a case study of Kenya. *BMC Medical Informatics and Decision Making*, *20*(1), 293. https://doi.org/10.1186/s12911-020-01315-7

Gorter, R. C., Albrecht, G., Hoogstraten, J., & Eijkman, M. A. (1999). Measuring work stress among Dutch dentists. *International Dental Journal*, *49*(3), 144–152. https://doi.org/10.1002/j.1875-595x.1999.tb00899.x

Goussinsky, R., & Livne, Y. (2019). The role of coping resources in the relationship between mistreatment and job burnout: Evidence across two healthcare settings. *Journal of Aggression, Maltreatment & Trauma*, *28*(10), 1250–1268. https://doi.org/10.1080/10926771.2018.1473905

Grensman, A., Acharya, B. D., Wändell, P., Nilsson, G. H., Falkenberg, T., Sundin, Ö., & Werner, S. (2018). Effect of traditional yoga, mindfulness-based cognitive therapy, and cognitive behavioral therapy, on health related quality of life: a randomized controlled trial on patients on sick leave because of burnout. *BMC Complementary and Alternative Medicine*, *18*(1), 80-85. https://doi.org/10.1186/s12906-018-2141-9

Gualano, M. R., Sinigaglia, T., Lo Moro, G., Rousset, S., Cremona, A., Bert, F., & Siliquini, R. (2021). The burden of burnout among healthcare professionals of

intensive care units and emergency departments during the COVID-19 Pandemic: A systematic review. *International Journal of Environmental Research and Public Health*, *18*(15), 8172. https://doi.org/10.3390/ijerph18158172

Guo, Y. F., Plummer, V., Lam, L., Wang, Y., Cross, W., & Zhang, J. P. (2019). The effects of resilience and turnover intention on nurses' burnout: Findings from a comparative cross-sectional study. *Journal of Clinical Nursing*, *28*(3-4), 499–508. https://doi.org/10.1111/jocn.14637

Halili A. (2021). Control of internal validity threats in a modified adaptive platform design using Halili Physical Therapy Statistical Analysis Tool (HPTSAT). *MethodsX*, *8*(101232), 1-8. https://doi.org/10.1016/j.mex.2021.101232

Harolds J. A. (2020). Quality and safety in healthcare, part LV: Leadership to prevent burnout and increase joy. *Clinical Nuclear Medicine*, *45*(2), 123–124. https://doi.org/10.1097/RLU.0000000000002714

Hobfoll, S. E. (1989). Conservation of resources. A new attempt at conceptualizing stress. *Am Psychol*, *44*(3), 513-524. https://doi.org/10.1037//0003-066x.44.3.513

Hobfoll, S. E., & Freedy, J. (2017). Conservation of resources: A general stress theory applied to burnout. In *Professional burnout* (pp. 115-129). Routledge.

Huber W. (2019). Reporting p Values. *Cell Systems*, *8*(3), 170–171. https://doi.org/10.1016/j.cels.2019.03.001

Hwang, H., Hur, W. M., & Shin, Y. (2021). Emotional exhaustion among the South

Korean workforce before and after COVID-19. *Psychology and Psychotherapy*, *94*(2), 371–381. https://doi.org/10.1111/papt.12309

Jang, S., Allen, T. D., Kim, E., & Cho, S. (2020). An examination of the temporal order of helping behaviors and emotional exhaustion. *Stress and Health: Journal of the International Society for the Investigation of Stress*, *36*(5), 663–674. https://doi.org/10.1002/smi.2943

Jiménez-Ortiz, J. L., Islas-Valle, R. M., Jiménez-Ortiz, J. D., Pérez-Lizárraga, E., Hernández-García, M. E., & González-Salazar, F. (2019). Emotional exhaustion, burnout, and perceived stress in dental students. *The Journal of International Medical Research*, *47*(9), 4251–4259. https://doi.org/10.1177/0300060519859145

Jose, S., Dhandapani, M., & Cyriac, M. C. (2020). Burnout and resilience among frontline nurses during COVID-19 pandemic: A cross-sectional study in the emergency department of a tertiary care center, North India. *Indian Journal of Critical Care Medicine: Peer-Reviewed, Official Publication of Indian Society of Critical Care Medicine*, *24*(11), 1081–1088. https://doi.org/10.5005/jp-journals-10071-23667

Josephson, A., & Smale, M. (2020). What do you mean by “informed consent?” Ethics in economic development research. *Applied Economic Perspectives and Policy*, *43*(4), 1305-1329. https://doi.org/10.1002/aepp.13112

Kececi, A., Dogan, C. D., & Gonullu, I. (2022). Assessment preferences of nursing and medical students: A correlational research. *Nurse Education in Practice*, *60*,

103305. https://doi.org/10.1016/j.nepr.2022.103305

Kelly, L. A., Gee, P. M., & Butler, R. J. (2021). Impact of nurse burnout on organizational and position turnover. *Nursing Outlook*, *69*(1), 96–102. https://doi.org/10.1016/j.outlook.2020.06.008

Kim J. H. (2019). Multicollinearity and misleading statistical results. *Korean Journal of Anesthesiology*, *72*(6), 558–569. https://doi.org/10.4097/kja.19087

Klitzman R. L. (2022). Understanding ethical challenges in medical education research. *Academic Medicine: Journal of the Association of American Medical Colleges*, *97*(1), 18–21. https://doi.org/10.1097/ACM.0000000000004253

Klusmann, U., Aldrup, K., Schmidt, J., & Lüdtke, O. (2021). Is emotional exhaustion only the result of work experiences? A diary study on daily hassles and uplifts in different life domains. *Anxiety, Stress, and Coping*, *34*(2), 173–190. https://doi.org/10.1080/10615806.2020.1845430

Koonrungsesomboon, N., Laothavorn, J., & Karbwang, J. (2016). Ethical considerations and challenges in first-in-human research. *Translational Research: The Journal of Laboratory and Clinical Medicine*, *177*, 6–18. https://doi.org/10.1016/j.trsl.2016.05.006

Koutsimani, P., Montgomery, A., & Georganta, K. (2019). The relationship between burnout, depression, and anxiety: A systematic review and meta-analysis. *Frontiers in Psychology, 10,* 284-303. https://doi.org/10.3389/fpsyg.2019.00284

Kwah, J., Weintraub, J., Fallar, R., & Ripp, J. (2016). The effect of burnout on medical errors and professionalism in first-year internal medicine residents. *Journal of Graduate Medical Education*, *8*(4), 597–600. https://doi.org/10.4300/JGME-D-15-00457.1

Labrague, L. J., & De Los Santos, J. A. A. (2020). COVID-19 anxiety among front-line nurses: Predictive role of organizational support, personal resilience and social support. *Journal of Nursing Management*, *28*(7), 1653–1661. https://doi.org/10.1111/jonm.13121

Lacy, B. E., & Chan, J. L. (2018). Physician Burnout: The Hidden Health Care Crisis. *Clinical Gastroenterology and Hepatology: The Official Clinical Practice Journal of the American Gastroenterological Association*, *16*(3), 311–317. https://doi.org/10.1016/j.cgh.2017.06.043

Lange, F., & Dewitte, S. (2021). Test-retest reliability and construct validity of the Pro-Environmental Behavior Task. *Journal of Environmental Psychology*, 73(2021), 1-8. https://doi.org/10.1016/j.jenvp.2021.101550

Lash, T. L., Ahern, T. P., Collin, L. J., Fox, M. P., & MacLehose, R. F. (2021). Bias analysis gone bad. *American Journal of Epidemiology*, *190*(8), 1604–1612. https://doi.org/10.1093/aje/kwab072

Lee, M. S., Carcone, A. I., Ko, L., Kulik, N., Ellis, D. A., & Naar, S. (2021). Managing outliers in adolescent food frequency questionnaire data. *Journal of Nutrition Education and Behavior*, *53*(1), 28–35. https://doi.org/10.1016/j.jneb.2020.08.002

Lee, Y. H., R Richards, K. A., & Washhburn, N. S. (2020). Emotional intelligence, job satisfaction, emotional exhaustion, and subjective well-being in high school athletic directors. *Psychological Reports*, *123*(6), 2418–2440. https://doi.org/10.1177/0033294119860254

Leedy, P. D., Ormrod, J. E., & Johnson, L. R. (2019). *Practical research: Planning and design.* Pearson

Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior, 45*(1), 79-122. https://doi.org/10.1006/jvbe.1994.1027

Lent, R. W., & Brown, S. D. (2019). Social cognitive career theory at 25: Empirical status of the interest, choice, and performance models. *Journal of Vocational Behavior*, 115-117. https://doi.org/10.1016/j.jvb.2019.06.004

Li, H., Cheng, B., & Zhu, X. P. (2018). Quantification of burnout in emergency nurses: A systematic review and meta-analysis. *International Emergency Nursing*, *39*, 46–54. https://doi.org/10.1016/j.ienj.2017.12.005

Liu, X., Ju, X., & Liu, X. (2021). The relationship between resilience and intent to stay among Chinese nurses to support Wuhan in managing COVID-19: The serial mediation effect of post-traumatic growth and perceived professional benefits. *Nursing Open*, *8*(5), 2866–2876. https://doi.org/10.1002/nop2.874

Liu, H., & Yuan, K. H. (2021). New measures of effect size in moderation analysis. *Psychological Methods*, *26*(6), 680–700.

https://doi.org/10.1037/met0000371

López, M. (2022). The effect of sampling mode on response rate and bias in elite surveys. *Quality & Quantity: International Journal of Methodology*, 1–17. https://doi.org/10.1007/s11135-022-01406-9

López-Cabarcos, M. Á., López-Carballeira, A., & Ferro-Soto, C. (2019). The role of emotional exhaustion among public healthcare professionals. *Journal of Health Organization and Management*, *33*(6), 649–655. https://doi.org/10.1108/JHOM-04-2019-0091

Low, Z. X., Yeo, K. A., Sharma, V. K., Leung, G. K., McIntyre, R. S., Guerrero, A., Lu, B., Sin Fai Lam, C. C., Tran, B. X., Nguyen, L. H., Ho, C. S., Tam, W. W., & Ho, R. C. (2019). Prevalence of burnout in medical and surgical residents: A meta-analysis. *International Journal of Environmental Research and Public Health*, *16*(9), 1479. https://doi.org/10.3390/ijerph16091479

Maciejewski, M. L. (2020). Quasi-experimental design. *Biostatistics & Epidemiology*, *4*(1), 38-47. http://doi.org/10.1080/24709360.2018.1477468

Maddux, J. E. (Ed.). (2013). *Self-efficacy, adaptation, and adjustment: Theory, research, and application*. Springer Science & Business Media.

Makara-Studzińska, M., Golonka, K., & Izydorczyk, B. (2019). Self-efficacy as a moderator between stress and professional burnout in firefighters. *International Journal of Environmental Research and Public Health*, *16*(2), 183-190. https://doi.org/10.3390/ijerph16020183

Mantri, S., Song, Y. K., Lawson, J. M., Berger, E. J., & Koenig, H. G. (2021). Moral injury and burnout in health care professionals during the COVID-19 pandemic. *Journal of Nervous and Mental Disease*, *209*(10), 720–726. https://doi.org/10.1097/NMD.0000000000001367

Martin, S. R., Fiske, E. A., & Lane, S. H. (2020). Resilience education for health-care professionals. *Creative Nursing*, *26*(4), 225–231. https://doi.org/10.1891/CRNR-D-19-00077

Martino, L. M. (2021). Postsecondary teacher quality and student achievement in Florida's career certificate programs using a causal-comparative study. *Career & Technical Education Research, 46*(1), 16–33. https://doi.org/10.5328/cter46.1.16

Mascha, E. J., & Vetter, T. R. (2018). Significance, errors, power, and sample size: The blocking and tackling of statistics. *Anesthesia and Analgesia*, *126*(2), 691–698. https://doi.org/10.1213/ANE.0000000000002741

Maslach, C. and Jackson, S.E. (1981) The measurement of experienced burnout. *Journal of Organizational Behavior, 2*, 99-113. http://dx.doi.org/10.1002/job.4030020205

Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: recent research and its implications for psychiatry. *World Psychiatry: Official Journal of the World Psychiatric Association (WPA)*, *15*(2), 103–111. https://doi.org/10.1002/wps.20311

McKinley, N., McCain, R. S., Convie, L., Clarke, M., Dempster, M., Campbell, W. J., &

Kirk, S. J. (2020). Resilience, burnout and coping mechanisms in UK doctors: A cross-sectional study. *BMJ Open, 10*(1), e031765. https://doi.org/10.1136/bmjopen-2019-031765

Medisauskaite, A., & Kamau, C. (2019). Reducing burnout and anxiety among doctors: Randomized controlled trial. *Psychiatry Research, 274*, 383–390. https://doi.org/10.1016/j.psychres.2019.02.075

Mheidly, N., Fares, M. Y., & Fares, J. (2020). Coping with stress and burnout associated with telecommunication and online learning. *Frontiers in Public Health, 8*, 574969. https://doi.org/10.3389/fpubh.2020.574969

Miguel-Puga, J. A., Cooper-Bribiesca, D., Avelar-Garnica, F. J., Sanchez-Hurtado, L. A., Colin-Martínez, T., Espinosa-Poblano, E., Anda-Garay, J. C., González-Díaz, J. I., Segura-Santos, O. B., Vital-Arriaga, L. C., & Jáuregui-Renaud, K. (2021). Burnout, depersonalization, and anxiety contribute to post-traumatic stress in frontline health workers at COVID-19 patient care, a follow-up study. *Brain and Behavior*, *11*(3), e02007. https://doi.org/10.1002/brb3.2007

Miller, C. J., Smith, S. N., & Pugatch, M. (2020). Experimental and quasi-experimental designs in implementation research. *Psychiatry Research, 283*, 112452-112460. https://doi.org/10.1016/j.psychres.2019.06.027

Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. *Annals of Cardiac Anaesthesia*, *22*(1), 67–72. https://doi.org/10.4103/aca.ACA_157_18

Mohd Rasdi, R., & Ahrari, S. (2020). The applicability of social cognitive career theory in predicting life satisfaction of university students: A meta-analytic path analysis. *PloS One*, *15*(8), e0237838. https://doi.org/10.1371/journal.pone.0237838

Molero Jurado, M., Pérez-Fuentes, M., Oropesa Ruiz, N. F., Simón Márquez, M., & Gázquez Linares, J. J. (2019). Self-efficacy and emotional intelligence as predictors of perceived stress in nursing professionals. *Medicina, 55*(6), 237-240. https://doi.org/10.3390/medicina55060237

Moran, V., Israel, H., & Sebelski, C. (2021). Leadership development of nursing professionals: Education and influences of self-efficacy. *Nursing Outlook, 69*(4), 589–597. https://doi.org/10.1016/j.outlook.2021.01.002

Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *The European Journal of General Practice*, *24*(1), 9–18. https://doi.org/10.1080/13814788.2017.1375091

Mosheva, M., Hertz-Palmor, N., Dorman Ilan, S., Matalon, N., Pessach, I. M., Afek, A., Ziv, A., Kreiss, Y., Gross, R., & Gothelf, D. (2020). Anxiety, pandemic-related stress and resilience among physicians during the COVID-19 pandemic. *Depression and Anxiety*, *37*(10), 965-971. https://doi.org/10.1002/da.23085

Mueller, C. W., & McCloskey, J. C. (1990). Nurses' job satisfaction: a proposed measure. *Nursing research*, *39*(2), 113–117. https://doi.org/10.1097/00006199-199003000-00014

Munthe-Kaas, H. M., Glenton, C., Booth, A., Noyes, J., & Lewin, S. (2019). Systematic mapping of existing tools to appraise methodological strengths and limitations of qualitative research: first stage in the development of the CAMELOT tool. *BMC Medical Research Methodology*, *19*(1), 1–13. https://doi.org/10.1186/s12874-019-0728-6

Murat, M., Köse, S., & Savaşer, S. (2021). Determination of stress, depression, and burnout levels of front-line nurses during the COVID-19 pandemic. *International Journal of Mental Health Nursing*, *30*(2), 533–543. https://doi.org/10.1111/inm.12818

National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. (1979). *The Belmont Report: Ethical principles and guidelines for the protection of human subjects of research.* U.S. Department of Health and Human Services. https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/read-thebelmont-report/index.htm

Nifadkar, S. S., & Bauer, T. N. (2016). Breach of belongingness during socialization: Newcomer relationship conflict, information, and task-related outcomes. *Journal of Applied Psychology, 101,* 1-13. https://dx.doi.org/10.1037/ap10000035

Nituica, C., Bota, O. A., Blebea, J., Cheng, C. I., & Slotman, G. J. (2021). Factors influencing resilience and burnout among resident physicians - a National Survey. *BMC Medical Education*, *21*(1), 514-518. https://doi.org/10.1186/s12909-021-02950-y

Nørskov, A. K., Lange, T., Nielsen, E. E., Gluud, C., Winkel, P., Beyersmann, J., de Uña-Álvarez, J., Torri, V., Billot, L., Putter, H., Wetterslev, J., Thabane, L., & Jakobsen, J. C. (2021). Assessment of assumptions of statistical analysis methods in randomized clinical trials: The what and how. *BMJ Evidence-Based Medicine*, *26*(3), 121–126. https://doi.org/10.1136/bmjebm-2019-111268

O'Connor, P., Lydon, S., O'Dowd, E., & Byrne, D. (2021). The relationship between psychological resilience and burnout in Irish doctors. *Irish Journal of Medical Science*, *190*(3), 1219–1224. https://doi.org/10.1007/s11845-020-02424-y

Ogińska-Bulik, N., & Michalska, P. (2021). Psychological resilience and secondary traumatic stress in nurses working with terminally ill patients-The mediating role of job burnout. *Psychological Services*, *18*(3), 398–405. https://doi.org/10.1037/ser0000421

Olsen, A. A., McLaughlin, J. E., & Harpe, S. E. (2020). Using multiple linear regression in pharmacy education scholarship. *Currents in Pharmacy Teaching & Learning*, *12*(10), 1258–1268. https://doi.org/10.1016/j.cptl.2020.05.017

Palinkas, L. A., Mendon, S. J., & Hamilton, A. B. (2019). Innovations in Mixed Methods Evaluations. *Annual Review of Public Health*, *40*, 423–442. https://doi.org/10.1146/annurev-publhealth-040218-044215

Parent-Lamarche, A., & Fernet, C. (2020). The role of employee self-efficacy in top-down burnout crossover: A longitudinal study. *Journal of Occupational and Environmental Medicine*, *62*(10), 803–809.

https://doi.org/10.1097/JOM.0000000000001924

Patel, R. S., Bachu, R., Adikey, A., Malik, M., & Shah, M. (2018). Factors related to physician burnout and its consequences: A review. *Behavioral Sciences*, *8*(11), 98-102. https://doi.org/10.3390/bs8110098

Patel, R. M., & Bartholomew, J. (2021). Impact of job resources and job demands on burnout among physical therapy providers. *International Journal of Environmental Research and Public Health, 18*(23), 12521. https://doi.org/10.3390/ijerph182312521

Patel, R. S., Sekhri, S., Bhimanadham, N. N., Imran, S., & Hossain, S. (2019). A review on strategies to manage physician burnout. *Cureus*, *11*(6), e4805-e4815. https://doi.org/10.7759/cureus.4805

Pereira, H., Gonçalves, V. O., & Assis, R. M. (2021). Burnout, organizational self-efficacy and self-esteem among Brazilian Teachers during the COVID-19 Pandemic. *European Journal of Investigation in Health, Psychology and Education*, *11*(3), 795–803. https://doi.org/10.3390/ejihpe11030057

Pham, T., Teng, C. I., Friesner, D., Li, K., Wu, W. E., Liao, Y. N., Chang, Y. T., & Chu, T. L. (2019). The impact of mentor-mentee rapport on nurses' professional turnover intention: Perspectives of social capital theory and social cognitive career theory. *Journal of Clinical Nursing*, *28*(13-14), 2669–2680. https://doi.org/10.1111/jocn.14858

Phillips, K., Knowlton, M., & Riseden, J. (2022). Emergency department nursing burnout

and resilience. *Advanced Emergency Nursing Journal*, *44*(1), 54–62. https://doi.org/10.1097/TME.0000000000000391

Pollock, A., Campbell, P., Cheyne, J., Cowie, J., Davis, B., McCallum, J., McGill, K., Elders, A., Hagen, S., McClurg, D., Torrens, C., & Maxwell, M. (2020). Interventions to support the resilience and mental health of frontline health and social care professionals during and after a disease outbreak, epidemic or pandemic: a mixed methods systematic review. *The Cochrane Database of Systematic Reviews*, *11*(11), CD013779. https://doi.org/10.1002/14651858.CD013779

Portoghese, I., Leiter, M. P., Maslach, C., Galletta, M., Porru, F., D'Aloja, E., Finco, G., & Campagna, M. (2018). Measuring burnout among university students: factorial Validity, invariance, and latent profiles of the Italian Version of the Maslach Burnout Inventory Student Survey (MBI-SS). *Frontiers in Psychology*, *9*, 2105-2010. https://doi.org/10.3389/fpsyg.2018.02105

Pradas-Hernández, L., Ariza, T., Gómez-Urquiza, J. L., Albendín-García, L., De la Fuente, E. I., & Cañadas-De la Fuente, G. A. (2018). Prevalence of burnout in paediatric nurses: A systematic review and meta-analysis. *PloS One*, *13*(4), e0195039-e0195043. https://doi.org/10.1371/journal.pone.0195039

Ratelle, J. T., Sawatsky, A. P., Kashiwagi, D. T., Schouten, W. M., Erwin, P. J., Gonzalo, J. D., Beckman, T. J., & West, C. P. (2019). Implementing bedside rounds to improve patient-centered outcomes: A systematic review. *BMJ Quality &*

Safety, *28*(4), 317–326. https://doi.org/10.1136/bmjqs-2017-007778

Raudenská, J., Steinerová, V., Javůrková, A., Urits, I., Kaye, A. D., Viswanath, O., & Varrassi, G. (2020). Occupational burnout syndrome and post-traumatic stress among healthcare professionals during the novel coronavirus disease 2019 (COVID-19) pandemic. *Best Practice & Research. Clinical Anaesthesiology*, *34*(3), 553–560. https://doi.org/10.1016/j.bpa.2020.07.008

Reith T. P. (2018). Burnout in United States healthcare professionals: A narrative review. *Cureus*, *10*(12), e3681-e3687. https://doi.org/10.7759/cureus.3681

Rivas, N., López, M., Castro, M.-J., Luis-Vian, S., Fernández-Castro, M., Cao, M.-J., García, S., Velasco-Gonzalez, V., & Jiménez, J.-M. (2021). Analysis of burnout syndrome and resilience in nurses throughout the COVID-19 Pandemic: A cross-sectional study. *International Journal of Environmental Research and Public Health*, *18*(19). https://doi.org/10.3390/ijerph181910470

Roberts, T., Daniels, J., Hulme, W., Hirst, R., Horner, D., Lyttle, M. D., Samuel, K., Graham, B., Reynard, C., Barrett, M., Foley, J., Cronin, J., Umana, E., Vinagre, J., Carlton, E., & collaborators of TERN, RAFT, PERUKI, ITERN, TRIC, and SATARN (2021). Psychological distress during the acceleration phase of the COVID-19 pandemic: a survey of doctors practicing in emergency medicine, anesthesia and intensive care medicine in the UK and Ireland. *Emergency Medicine Journal: EMJ*, *38*(6), 450–459. https://doi.org/10.1136/emermed-2020-210438

Rodrigues, H., Cobucci, R., Oliveira, A., Cabral, J. V., Medeiros, L., Gurgel, K., Souza, T., & Gonçalves, A. K. (2018). Burnout syndrome among medical residents: A systematic review and meta-analysis. *PloS One*, *13*(11), e0206840. https://doi.org/10.1371/journal.pone.0206840

Rotenstein, L. S., Torre, M., Ramos, M. A., Rosales, R. C., Guille, C., Sen, S., & Mata, D. A. (2018). Prevalence of burnout among physicians: A systematic review. *The Journal of American Medical Association, JAMA*, *320*(11), 1131–1150. https://doi.org/10.1001/jama.2018.12777

Sacadura-Leite, E., Sousa-Uva, A., Ferreira, S., Costa, P. L., & Passos, A. M. (2020). Working conditions and high emotional exhaustion among hospital nurses. *Revista Brasileira De Medicina Do Trabalho: Publicacao Oficial Da Associacao Nacional De Medicina Do Trabalho-ANAMT*, *17*(1), 69–75. https://doi.org/10.5327/Z1679443520190339

Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients: Appropriate use and interpretation. *Anesthesia and Analgesia*, *126*(5), 1763–1768. https://doi.org/10.1213/ANE.0000000000002864

Schroeder, G. M., Cavender, C. E., Blau, M. E., Jenkins, J. L., Mathews, D. H., & Wedekind, J. E. (2022). A small RNA that cooperatively senses two stacked metabolites in one pocket for gene control. *Nature Communications*, *13*(1), 199. https://doi.org/10.1038/s41467-021-27790-8

Schuller, S. K., Schuller, J. M., Prabu, J. R., Baumgärtner, M., Bonneau, F., Basquin, J.,

& Conti, E. (2020). Structural insights into the nucleic acid remodeling mechanisms of the yeast THO-Sub2 complex. *eLife*, *9*, e61467-e61470. https://doi.org/10.7554/eLife.61467

Setiawati, Y., Wahyuhadi, J., Joestandari, F., Maramis, M. M., & Atika, A. (2021). Anxiety and resilience of healthcare workers during COVID-19 pandemic in Indonesia. *Journal of Multidisciplinary Healthcare*, *14*, 1–8. https://doi.org/10.2147/JMDH.S276655

Shah, M. K., Gandrakota, N., Cimiotti, J. P., Ghose, N., Moore, M., & Ali, M. K. (2021). Prevalence of and factors associated with nurse burnout in the US. *JAMA Network Open*, *4*(2), e2036469. https://doi.org/10.1001/jamanetworkopen.2020.36469

Shepherd, L., & Macklin, R. (2019). Erosion of informed consent in U.S. research. *Bioethics, 33*(1), 4–12. https://doi.org/10.1111/bioe.12532

Sklar, M., Ehrhart, M. G., & Aarons, G. A. (2021). COVID-related work changes, burnout, and turnover intentions in mental health providers: A moderated mediation analysis. *Psychiatric Rehabilitation Journal, 44*(3), 219–228. https://doi.org/10.1037/prj0000480

Slabšinskienė, E., Gorelik, A., Kavaliauskienė, A., & Zaborskis, A. (2021). Burnout, lifestyle and relaxation among dentists in Lithuania: A cross-sectional study. *BMC Health Services Research, 21*(1), 1–9. https://doi.org/10.1186/s12913-021-07074-z

Slocum, T. A., Pinkelman, S. E., Joslyn, P. R., & Nichols, B. (2022). Threats to internal

validity in multiple-baseline design variations. *Perspectives on Behavior Science*, *45*(3), 619–638. https://doi.org/10.1007/s40614-022-00326-1

Smale D. A. (2020). Impacts of ocean warming on kelp forest ecosystems. *The New Phytologist*, *225*(4), 1447–1454. https://doi.org/10.1111/nph.16107

Smith, T. J., Walker, D. A., & McKenna, C. M. (2020). A coefficient of discrimination for use with nominal and ordinal regression models. *Journal of Applied Statistics*, *48*(16), 3208–3219. https://doi.org/10.1080/02664763.2020.1796940

Soto-Rubio, A., Giménez-Espert, M. D. C., & Prado-Gascó, V. (2020). Effect of emotional intelligence and psychosocial risks on burnout, job satisfaction, and nurses' health during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health, 17*(21), 7998. https://doi.org/10.3390/ijerph17217998

Story, D. A., & Tait, A. R. (2019). Survey research. *Anesthesiology*, *130*(2), 192–202. https://doi.org/10.1097/ALN.0000000000002436

Sullivan, D., Sullivan, V., Weatherspoon, D., & Frazer, C. (2022). Comparison of nurse burnout, before and during the COVID-19 pandemic. *The Nursing Clinics of North America*, *57*(1), 79–99. https://doi.org/10.1016/j.cnur.2021.11.006

Tang, J. H., & Hudson, P. (2019). Evidence-Based Practice Guideline: Nurse Retention for Nurse Managers. *Journal of Gerontological Nursing*, *45*(11), 11–19. https://doi.org/10.3928/00989134-20191011-03

Tarro, L., Llauradó, E., Ulldemolins, G., Hermoso, P., & Solà, R. (2020). Effectiveness

of workplace interventions for improving absenteeism, productivity, and work ability of employees: A systematic review and meta-analysis of randomized controlled trials. *International Journal of Environmental Research and Public Health*, *17*(6), 1901-1907. https://doi.org/10.3390/ijerph17061901

Tatum A. K. (2018). Workplace climate and satisfaction in sexual minority populations: An application of social cognitive career theory. *Journal of Counseling Psychology*, *65*(5), 618–628. https://doi.org/10.1037/cou0000292

Tawfik, D. S., Profit, J., Morgenthaler, T. I., Satele, D. V., Sinsky, C. A., Dyrbye, L. N., Tutty, M. A., West, C. P., & Shanafelt, T. D. (2018). Physician burnout, well-being, and work unit safety grades in relationship to reported medical errors. *Mayo Clinic Proceedings*, *93*(11), 1571–1580. https://doi.org/10.1016/j.mayocp.2018.05.014

Tenny, S., Brannan, J.M., Brannan, G.D. (2022). *Qualitative Study*. In: StatPearls. StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK470395/

Tessler, M. H., & Goodman, N. D. (2019). The language of generalization. *Psychological Review*, *126*(3), 395–436. https://doi.org/10.1037/rev0000142

Timoneda J. C. (2021). Estimating group fixed effects in panel data with a binary dependent variable: How the LPM outperforms logistic regression in rare events data. *Social Science Research*, *93*, 102486. https://doi.org/10.1016/j.ssresearch.2020.102486

Tourunen, A., Siltanen, S., Saajanaho, M., Koivunen, K., Kokko, K., & Rantanen, T.

(2021). Psychometric properties of the 10-item Connor-Davidson resilience scale among Finnish older adults. *Aging & Mental Health*, *25*(1), 99–106. https://doi.org/10.1080/13607863.2019.1683812

Tsiga, E., Panagopoulou, E., & Montgomery, A. (2017). Examining the link between burnout and medical error: A checklist approach. *Burnout Research, 6*(1), 1-8. https://doi.org/10.1016/j.burn.2017.02.002

Turaga, R. (2019). Effective communication in organizations. *IUP Journal of Soft Skills, 13*(1), 63-69. https://www.proquest.com/openview/f66811fddb041d7db2b3a5a94688c20e

Turale, S., Meechamnan, C., & Kunaviktikul, W. (2020). Challenging times: Ethics, nursing and the COVID-19 pandemic. *International Nursing Review*, *67*(2), 164–167. https://doi.org/10.1111/inr.12598

Turner, D. P. (2020). Sampling methods in research design. *Headache: The Journal of Head & Face Pain*, *60*(1), 8–12. https://doi.org/10.1111/head.13707

Udushirinwa, C. C., McVicar, A., & Teatheredge, J. (2022). Utilization of Job Demands-Resources (JD-R) Theory to evaluate workplace stress experienced by health care assistants in a UK in-patient dementia unit after 10 years of national financial austerity (2008-2018). *International Journal of Environmental Research and Public Health*, *20*(1), 65. https://doi.org/10.3390/ijerph20010065

U.S. Department of Health and Human Services. (2022). *The Belmont Report*. https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/index.html

Van Dusen, B., & Nissen, J. (2019). Modernizing use of regression models in physics education research: A review of hierarchical linear modeling. *Physical Review Physics Education Research, 15*(2). https://doi.org/10.1103/physrevphyseducres.15.020108

VanMeter, F., & Cicchetti, D. (2020). Resilience. *Handbook of Clinical Neurology*, *173*, 67–73. https://doi.org/10.1016/B978-0-444-64150-2.00008-3

Verweij, H., van Ravesteijn, H., van Hooff, M., Lagro-Janssen, A., & Speckens, A. (2018). mindfulness-based stress reduction for residents: A randomized controlled trial. *Journal of General Internal Medicine*, *33*(4), 429–436. https://doi.org/10.1007/s11606-017-4249-x

Wen, B., Zhou, X., Hu, Y., & Zhang, X. (2020). Role stress and turnover intention of front-line hotel employees: The roles of burnout and service climate. *Frontiers in Psychology*, *11*, 36. https://doi.org/10.3389/fpsyg.2020.00036

West, C. P., Dyrbye, L. N., Erwin, P. J., & Shanafelt, T. D. (2016). Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. *Lancet (London, England)*, *388*(10057), 2272–2281. https://doi.org/10.1016/S0140-6736(16)31279-X

West, C. P., Dyrbye, L. N., Sinsky, C., Trockel, M., Tutty, M., Nedelec, L., Carlasare, L. E., & Shanafelt, T. D. (2020). Resilience and burnout among physicians and the general US working population. *JAMA Network Open*, *3*(7), e209385-e209390. https://doi.org/10.1001/jamanetworkopen.2020.9385

Whittington, K. D., Shaw, T., McKinnies, R. C., & Collins, S. K. (2021). Emotional exhaustion as a predictor for burnout among nurses. *Nursing Management, 52*(1), 22–28. https://doi.org/10.1097/01.NUMA.0000724928.71008.47

Wickramasinghe, N. D., Dissanayake, D. S., & Abeywardena, G. S. (2018). Validity and reliability of the Maslach Burnout Inventory-Student Survey in Sri Lanka. *BMC Psychology*, *6*(1), 52-62. https://doi.org/10.1186/s40359-018-0267-7

Willard-Grace, R., Knox, M., Huang, B., Hammer, H., Kivlahan, C., & Grumbach, K. (2019). Burnout and health care workforce turnover. *Annals of Family Medicine*, *17*(1), 36–41. https://doi.org/10.1370/afm.2338

Wilson, W., Raj, J. P., Narayan, G., Ghiya, M., Murty, S., & Joseph, B. (2017). Quantifying burnout among emergency medicine professionals. *Journal of Emergencies, Trauma, and Shock*, *10*(4), 199–204. https://doi.org/10.4103/JETS.JETS_36_17

Wilcox R. R. (2022). Two-way ANOVA: Inferences about interactions based on robust measures of effect size. *The British Journal of Mathematical and Statistical Psychology*, *75*(1), 46–58. https://doi.org/10.1111/bmsp.12244

Woo, T., Ho, R., Tang, A., & Tam, W. (2020). Global prevalence of burnout symptoms among nurses: A systematic review and meta-analysis. *Journal of Psychiatric Research*, *123*, 9–20. https://doi.org/10.1016/j.jpsychires.2019.12.015

Yang, K., Tu, J., & Chen, T. (2019). Homoscedasticity: an overlooked critical assumption for linear regression. *General Psychiatry*, *32*(5), e100148-e100153.

https://doi.org/10.1136/gpsych-2019-100148

Yates S. W. (2020). Physician stress and burnout. *The American Journal of Medicine*, *133*(2), 160–164. https://doi.org/10.1016/j.amjmed.2019.08.034

Yin, R. K. (2018). *Case Study Research and Applications: Design and Methods* (6th ed.). Sage.

Yörük, S., & Güler, D. (2021). The relationship between psychological resilience, burnout, stress, and sociodemographic factors with depression in nurses and midwives during the COVID-19 pandemic: A cross-sectional study in Turkey. *Perspectives in Psychiatric Care*, *57*(1), 390–398. https://doi.org/10.1111/ppc.12659

Yu, H., Huang, C., Chin, Y., Shen, Y., Chiang, Y., Chang, C., & Lou, J. (2021). The mediating effects of nursing professional commitment on the relationship between social support, resilience, and intention to stay among newly graduated male nurses: a cross-sectional questionnaire survey. *International Journal of Environmental Research and Public Health*, *18*(14), 7546. https://doi.org/10.3390/ijerph18147546

Zamani-Alavijeh, F., Araban, M., Harandy, T. F., Bastami, F., & Almasian, M. (2019). Sources of health care providers' self-efficacy to deliver health education: A qualitative study. *BMC Medical Education, 19*(1), 16-20. https://doi.org/10.1186/s12909-018-1448-z

Zhang, J., Cao, C., Shen, S., & Qian, M. (2019). examining effects of self-efficacy on

research motivation among Chinese university teachers: Moderation of leader support and mediation of goal orientations. *The Journal of Psychology*, *153*(4), 414–435. https://doi.org/10.1080/00223980.2018.1564230

Zhang, X. J., Song, Y., Jiang, T., Ding, N., & Shi, T. Y. (2020). Interventions to reduce burnout of physicians and nurses: An overview of systematic reviews and meta-analyses. *Medicine*, *99*(26), e20992. https://doi.org/10.1097/MD.0000000000020992

Zhang, L., Ju, T., Jin, X., Ji, J., Han, J., Zhou, X., & Yuan, Z. (2022). Network regression analysis for binary and ordinal categorical phenotypes in transcriptome-wide association studies. *Genetics*, *222*(4), iyac153. https://doi.org/10.1093/genetics/iyac153

Zheng, H., Shao, H., & Zhou, Y. (2018). Burnout among Chinese adult reconstructive surgeons: incidence, risk factors, and relationship with intraoperative irritability. *The Journal of Arthroplasty, 33*(4), 1253–1257. https://doi.org/10.1016/j.arth.2017.10.049

Appendix A: MBI Human Services Survey

MBI Human Services Survey

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

	How often 0-6	Statements:
1.	_____	I feel emotionally drained from my work.
2.	_____	I feel used up at the end of the workday.
3.	_____	I feel fatigued when I get up in the morning and have to face another day on the job.
4.	_____	I can easily understand how my recipients feel about things.
5.	_____	I feel I treat some recipients as if they were impersonal objects.
6.	_____	Working with people all day is really a strain for me.
7.	_____	I deal very effectively with the problems of my recipients.
8.	_____	I feel burned out from my work.
9.	_____	I feel I'm positively influencing other people's lives through my work.
10.	_____	I've become more callous toward people since I took this job.
11.	_____	I worry that this job is hardening me emotionally.
12.	_____	I feel very energetic.
13.	_____	I feel frustrated by my job.
14.	_____	I feel I'm working too hard on my job.
15.	_____	I don't really care what happens to some recipients.
16.	_____	Working with people directly puts too much stress on me.
17.	_____	I can easily create a relaxed atmosphere with my recipients.
18.	_____	I feel exhilarated after working closely with my recipients.
19.	_____	I have accomplished many worthwhile things in this job.
20.	_____	I feel like I'm at the end of my rope.
21.	_____	In my work, I deal with emotional problems very calmly.
22.	_____	I feel recipients blame me for some of their problems.

(Administrative use only)

EE Total score: _____ DP Total score: _____ PA Total score: _____

EE Average score: _____ DP Average score: _____ PA Average score: _____

Appendix B: Permission to Use MBI Human Services Survey

Maslach Burnout Inventory™

Instruments and Scoring Keys

Includes MBI Forms:

Human Services - MBI-HSS
Medical Personnel - MBI-HSS (MP)
Educators - MBI-ES
General - MBI-GS
Students - MBI-GS (S)

Christina Maslach
Susan E. Jackson
Michael P. Leiter
Wilmar B. Schaufeli
Richard L. Schwab

Published by Mind Garden, Inc.

info@mindgarden.com
www.mindgarden.com

Important Note to Licensee

If you have purchased a license to reproduce or administer a fixed number of copies of an existing Mind Garden instrument, manual, or workbook, you agree that it is your legal responsibility to compensate the copyright holder of this work — via payment to Mind Garden — for reproduction or administration in any medium. **Reproduction includes all forms of physical or electronic administration including online survey, handheld survey devices, etc.**

The copyright holder has agreed to grant a license to reproduce the specified number of copies of this document or instrument **within three years from the date of purchase.**

You agree that you or a person in your organization will be assigned to track the number of reproductions or administrations and will be responsible for compensating Mind Garden for any reproductions or administrations in excess of the number purchased.

Appendix C: Permission to use McCain Intent to Stay Scale

Thank you for your order.

This Agreement between Mrs. Florina Karasik ("You") and John Wiley and Sons ("John Wiley and Sons") consists of your license details and the terms and conditions provided by John Wiley and Sons and Copyright Clearance Center.

Your confirmation email will contain your order number for future reference.

Printable Details

License Number	5503860537920
License date	Mar 07, 2023

Licensed Content

Licensed Content Publisher	John Wiley and Sons
Licensed Content Publication	Journal of Nursing Scholarship
Licensed Content Title	Satisfaction, Commitment and Professionalism of Newly Employed Nurses
Licensed Content Author	Bruce E. McCain, Joanne Comi McCloskey
Licensed Content Date	Oct 2, 2007
Licensed Content Volume	19
Licensed Content Issue	1
Licensed Content Pages	5

Order Details

Type of use	Dissertation/Thesis
Requestor type	University/Academic
Format	Print
Portion	Figure/table
Number of figures/tables	1
Will you be translating?	No

About Your Work

Title	The Investigation of Resilience as a Moderating Factor on Burnout and Intention to Stay in Nursing Professionals.
Institution name	Walden University
Expected presentation date	Apr 2023

Additional Data

Portions	McCain's Intent to Stay Scale, McCain Behavior commitment scale

Requestor Location

Requestor Location	Mrs. Florina Karasik 9 Bennington Place MORGANVILLE, NJ 07751 United States Attn: Florina Karasik

Tax Details

Publisher Tax ID	EU826007151

Price

Total	0.00 USD

Appendix D: McCain Intent to Stay Scale

McCain's Intent to Stay Scale
(A 5-Item Subscale from McCain's Behavioral Commitment Scale)

Purpose: To assess the staff nurse's perception of the likelihood to stay in her or his current job.

Instructions: For each nurse receiving the nurse retention guideline, please have the nurse complete the McCain's Intent to Stay Scale. This scale should be completed at baseline (before guideline is initiated) and on a 6-month basis.

Scoring: Each item is scored from 1 "strongly disagree" to 5 "strongly agree". Scores are summed and divided by the number of items to attain a mean. A higher score indicated higher intent to stay.

Directions: Please circle the number that best reflects your response to each statement.

ITEMS	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. I plan to work at my present job for as long as possible.	5	4	3	2	1
2. I will probably spend the rest of my career in this job or the jobs that it leads to in this hospital.	5	4	3	2	1
3. Even if this job does not meet all my expectations, I will not quit.	5	4	3	2	1
4. Under no circumstances would I leave my present job.	5	4	3	2	1
5. I plan to keep this job for at least two or three years.	5	4	3	2	1

Appendix E: Permission to Use Connor-Davidson Resilience Scale

Dear Florina:

Thank you for your interest in the Connor-Davidson Resilience Scale (CD-RISC). We are pleased to grant permission for use of the CD-RISC-10 in the project you have described under the following terms of agreement:

1. You agree (i) not to use the CD-RISC for any commercial purpose unless permission has been granted, or (ii) in research or other work performed for a third party, or (iii) provide the scale to a third party without permission. If other colleagues or off-site collaborators are involved with your project, their use of the scale is restricted to the project described, and the signatory of this agreement is responsible for ensuring that all other parties adhere to the terms of this agreement.

2 You may use the CD-RISC in written form, by telephone, or in **secure electronic format whereby the scale is protected from copying, downloading, alteration, repeated use, unauthorized distribution or search engine indexing. In all use of the CD-RISC, including electronic versions, the full copyright and terms of use statement must appear with the scale. The scale should neither be distributed as an email attachment, nor appear on social media, nor in any form where it is accessible to the public and should be removed from electronic and other sites once the activity or project has been completed. The RISC can only be made accessible in electronic form after subjects have logged in through a link, password or unique personal identifier.**

3 Further information on the CD-RISC can be found at the www.cd-risc.com website. The scale's content may not be modified, although in some circumstances the formatting may be adapted with permission of either Dr. Connor or Dr. Davidson. If you wish to create a non-English language translation or culturally modified version of the CD-RISC, please let us know and we will provide details of the standard procedures.

4 Three forms of the scale exist: the original 25 item version and two shorter versions of 10 and 2 items respectively. When using the CD-RISC 25, CD-RISC 10 or CD-RISC 2, whether in English or other language, please include the full copyright statement and use restrictions as it appears on the scale.

5. A **student-rate** fee of $ 33 US is payable to Jonathan Davidson at 2434 Racquet Club Drive, Seabrook Island, SC 29455, USA either by PayPal (www.paypal.com, account mail@cd-risc.com), cheque or bank wire transfer (in US $$). Money orders are not accepted. **It is kindly requested that payment be made within 30 days of signing this agreement below.**

6. Complete and return this form via email to mail@cd-risc.com.

7. In any publication or report resulting from use of the CD-RISC, you do not publish or partially reproduce items from the CD-RISC without first securing permission from the authors.

If you agree to the terms of this agreement, please email a signed copy to the above email address. **Upon receipt of the signed agreement, we will email a copy of the scale.**

For questions regarding use of the CD-RISC, please contact Jonathan Davidson at mail@cd-risc.com. We wish you well in pursuing your goals.

Sincerely yours,

Jonathan R. T. Davidson, M.D.

Agreed to by:

Florina Haraqi 02/09/2023

Signature (printed) Date

Student@ Walden University

Title

Walden University

Organization

Appendix F: Connor-Davidson Resilience Scale

Connor-Davidson Resilience Scale 10 (CD-RISC-10) ©

initials ☐☐☐ *ID#* ☐☐☐☐☐☐☐ *date* ☐☐/☐☐/☐☐☐☐ *visit* ☐☐ *age* ☐☐

---

*Please indicate how much you agree with the following statements as they apply to you over the last **month**. If a particular situation has not occurred recently, answer according to how you think you would have felt.*

---

		not true at all (0)	rarely true (1)	sometimes true (2)	often true (3)	true nearly all the time (4)
1.	I am able to adapt when changes occur.	☐	☐	☐	☐	☐
2.	I can deal with whatever comes my way.	☐	☐	☐	☐	☐
3.	I try to see the humorous side of things when I am faced with problems.	☐	☐	☐	☐	☐
4.	Having to cope with stress can make me stronger.	☐	☐	☐	☐	☐
5.	I tend to bounce back after illness, injury, or other hardships.	☐	☐	☐	☐	☐
6.	I believe I can achieve my goals, even if there are obstacles.	☐	☐	☐	☐	☐
7.	Under pressure, I stay focused and think clearly.	☐	☐	☐	☐	☐
8.	I am not easily discouraged by failure.	☐	☐	☐	☐	☐
9.	I think of myself as a strong person when dealing with life's challenges and difficulties.	☐	☐	☐	☐	☐
10.	I am able to handle unpleasant or painful feelings like sadness, fear, and anger.	☐	☐	☐	☐	☐

Add up your score for each column 0 + ____ + ____ + ____ + ____

Add each of the column totals to obtain CD-RISC score = _____

Appendix G: Letter of Invitation to Participate in Research

Walden University

Letter of Invitation to Participate in Research

The Investigation of Resilience as a Moderating Factor on Burnout and Intention to Stay in Nursing Professionals.

To Whom It May Concern.

I invite you to participate in a research study conducted by Florina Karasik, student in the Walden University Doctor of Business Administration program.

The purpose of this study is to investigate how resilience affects the relationship between burnout and intention to stay of licensed registered nurses with Bachelor of Science in Nursing degrees working with adults in a hospital setting.

You are eligible to participate in this study if you are:

- A licensed registered nurse with Bachelor of Science in Nursing degree
- Work with adults in hospital setting in the United States of America

You will complete a survey which should take about 30 minutes to complete. This survey contains questions about burnouts, resilience, and intent to stay in a professional organization. Your responses will be anonymous. Please do not input any identifiable information (your name, address, name of workplace) on your survey.

Your participation in this study is completely voluntary. If you choose to participate, you may choose to stop participation at any time. If you choose to participate, you can access the survey at https://www.surveymonkey.com/r/NM7NXRF.

Feel free to contact me at florina.karasik@waldenu.edu or [redacted] if you have any questions.

Thank you very much,

Florina Karasik

Florina Karasik

DBA Student

Walden University