3-19-2024

The Influence of Leadership on Nurse Retention in the U.S. South Atlantic Division

Dewight Walker
Walden University

Walden University

College of Management and Human Potential

This is to certify that the doctoral study by

DeWight Walker

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. Rabeh Hijazi, Committee Chairperson, Health Sciences Faculty
Dr. Matt Frederiksen-England, Committee Member, Health Sciences Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2024

Abstract

The Influence of Leadership on Nurse Retention in the U.S. South Atlantic Division

by

DeWight Walker

MPH, The University of Georgia, 2019

BA, Beloit College, 2017

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Healthcare Administration

Walden University

May 2024

Abstract

Nurse turnover exerts significant pressure on health care systems, which are predicated on management culture. The turnover of proficient and skilled nurses disrupts the continuity of care, reduces patient safety, increases the cost of care, and increases workloads of retained staff. The purpose of this quantitative study was to examine the association between management and leadership effectiveness (independent variables) and nurses' job satisfaction, burnout, and stressful work environments (dependent variables) within the South Atlantic Division of the United States. The study utilized secondary data collected from the National Sample Survey of Registered Nurses in 2018. Guided by Herzberg's two-factor theory on work motivation, the study utilized a sample of 8,143 nurses. Results of simple linear and multiple logistic regression analysis indicated a statistically significant relationship between management/leadership effectiveness and nurses' satisfaction, burnout, and stressful work environment. The study contributes to positive social change by assisting organizations to understand that retaining skilled nursing professionals in a culture where their services are at a premium can be influenced by management/leadership to improve patient outcomes due to increased job satisfaction, increased continuity of care among patients, and reduced burnout in the clinical environment. It is essential that health care leaders become innovative in the development of processes and policies that support health care workers.

The Influence of Leadership on Nurse Retention in the U.S. South Atlantic Division

by

DeWight Walker

MPH, The University of Georgia, 2019

BA, Beloit College, 2017

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Healthcare Administration

Walden University

May 2024

Dedication

I would like to dedicate this symbol of work to God, the author of my life. I thank Him for allowing me to keep the faith and perseverance. I also dedicate this work to my children so that I can be an example for them in the future and that they can achieve anything in this life.

Acknowledgments

I would like to acknowledge my mentor, Dr. Rongal Nikora, who assisted and helped me navigate this tenacious process. Your guidance and encouragement went further than you could ever have imagined. You have always been in my corner and allowed me to achieve something unthinkable starting out.

I want to acknowledge my kids; you were my inspiration, keeping me through long, frustrating nights. Thank you.

I want to thank my chair, Dr. Robert Hijazi, who always kept me focused on the bigger picture. My committee member, Dr. Matt Frederiksen-England, found pleasure in all the details, which I appreciate immensely. Dr. Kristin Wiginton assisted and gave me fresh insight and inspiration at a critical moment during this process.

Lastly, I want to thank my family and friends for their constant support throughout the process.

Table of Contents

List of Tables

List of Figures

Section 1: Foundation of the Study and Literature Review

In today's rapidly changing health care landscape, nurse retention has become a significant concern for health care leaders and policymakers. The nursing shortage and the snowballing demand for health care services have increased the need to focus on absorbing the most experienced and skilled nursing professionals (Smama'h et al., 2023). In the changing health care landscape, creating sustainable solutions to nurse retention continues to be a daunting task. The positive social change implications of the current study are that organizations may understand that retaining skilled nursing professionals in a culture where their services are at a premium can be influenced by management/leadership to improve patient outcomes due to increased job satisfaction, increased continuity of care among patients, and reduced burnout in the clinical environment. It is essential that health care leaders become innovative in the development of processes and policies that support health care workers.

Section 1 provides the contextual background of the study, including the problem statement, purpose of the study, research questions and hypotheses, theoretical framework, nature of the study, literature search strategy, literature review in relation to key words, definitions, assumptions, scope, limitations, and significance. Section 2 details the research design and rationale, methodology, sampling procedures, population, operationalization, threats to validity, and ethical procedures. Section 3 contains reports of how secondary data were obtained, the results, and a summary. Section 4 contains the interpretation of the findings, limitations of the study, recommendations, and implications for professional practice and social change.

Background

Nurse retention is a significant problem in today's workforce, which is exacerbated by burnout and poor management or leadership (Majeed & Jamshed, 2020). Solving this problem continues to be a constant battle among health organizations. Numerous research and policy reports called for leadership to establish friendly and conducive working environments, institute new models of care, and bring health and well-being to a shattered and fraught workforce (Majeed & Jamshed, 2020; Naseer et al., 2017; Saleh et al., 2018). Khairunnisa and Nadjib (2019) contended that leadership is a significant factor that influences nurses' job satisfaction and retention and impacts patients' health outcomes. In a health care facility's culture, supportive leadership plays a significant role in providing a favorable environment that encourages autonomy, motivation, job satisfaction, and career progress (Smama'h et al., 2023). Suwarno (2023) added that a leader should institute a positive work environment that will certify an equal prospect for advancement and fulfillment within the workforce. According to Marufu et al. (2021) and Simone et al. (2018), poor quality management affects the nursing culture and organizational performance by decreasing job satisfaction and nurse retention. A productive and conducive work environment among nursing professionals and their support staff can also lessen tensions and differences, thereby providing an opportunity for career progression and advancement (Khairunnisa & Nadjib, 2019).

Naseer et al. (2017) noted that job satisfaction attracts the most qualified and talented candidates in the health care industry and influences job retention. Numerous studies have explored the relationship between nursing managers' leadership styles and

job satisfaction among nurses (AL-Dossary, 2022; Lei et al., 2022). The extensive research detailed the benefits of other common leadership styles, including autocratic, laissez-faire, democratic, transactional, transformative, and servant leadership (Anwer et al., 2022). However, instead of addressing leadership styles, I analyzed leadership/management as its own entity concerning nurse retention. I explored the gap in nurses' perception of the effectiveness of leadership/management. I sought to understand how management/leadership practices dictate whether nurses stay in the profession, and nurses' levels of fulfillment and satisfaction in their job in the United States (see Woodward & Willgerodt, 2022). The culture established by leadership/management influences how nurses provide quality care. The landscape of the organizational culture can have negative or positive effects on the well-being of nurses (Quesado et al., 2022).

Delivering quality care relies on organizational leadership and the environment in which nurses operate (Shaffer & Curtin, 2020; H. Wang et al., 2020). Poor leadership skills can lead to undesirable attitudes that create job dissatisfaction, increase patient health outcomes, promote inadequate health service delivery, and lead to the collapse of health care institutions (Majeed & Jamshed, 2020). Addressing these issues can promote positive social change by developing incremental organizational change in a culture where nurses feel welcomed, which may reduce nurse turnover. Increased nurse retention can be attributed to increased job satisfaction and reduced nurse burnout, which equates to more communities having a positive experience of patient satisfaction. To address the gap in the diverse health care environment, executives and staff nurses must work toward

establishing positive, mutually beneficial relationships that heighten efficiency, production, job satisfaction, and nurse retention (Shaffer & Curtin, 2020).

Problem Statement

Irrespective of the role nurses play in delivering optimum patient care, the chronic problem of nurse turnover exerts significant pressure on health care systems on a global level, which is predicated on management culture (Buerhaus, 2021; Marufu et al., 2021). The exit of proficient and skilled nurses disrupts the continuity of care, reduces patient safety, increases the cost of care, and places demanding workloads on the retained staff (De Vries et al., 2023). The remaining nursing staff must assume higher workloads and added responsibilities, which can contribute to feelings of burnout and reduced job satisfaction (Dewanto & Wardhani, 2018; Islam et al., 2021). Nurse leaders and policymakers must address the underlying factors influencing nurse turnover and formulate effective strategies to boost nurse satisfaction and retention rates.

Leadership and management, career advancement, work environment, support at work, and other factors influence nurse retention in health care institutions (Marufu et al., 2021). Health care organizations can encourage and train leaders to support nurses at work, conduct a leader's self-assessment, promote nurses' career advancement, and provide a positive work environment (Marufu et al., 2021; Shaffer & Curtin, 2020). Health care leaders who conduct a self-assessment will understand the type of leader they are. By understanding this dynamic, leaders are then able to provide productive leadership geared toward the desired population, which can yield favorable results (Magombo-Bwanali, 2019). Nurses being supported at work and having a positive work

environment portray commitment and dedication from the organization, which can increase nurse retention (Dewanto & Wardhani, 2018; Senek et al., 2020). Limited studies have addressed leadership effectiveness in positively impacting nurses' job satisfaction and organizational commitment; there are gaps in understanding why nurses may want to leave the nursing field. The current study addressed nurses' perceptions of how management/leadership influences nurse retention in the United States (see Woodward & Willgerodt, 2022). The multifaceted and diverse nature of nursing warranted a comprehensive inquiry into how leadership behaviors influence nurse retention.

Purpose of the Study

This quantitative study was an in-depth and comprehensive analysis of nurses' intent to leave their profession and the role of leadership/management culture in influencing nurse retention. I examined the correlation between leadership effectiveness and nurses' job satisfaction, burnout, and stressful work environments. The research bolstered existing knowledge by addressing the relationship between poor management/ leadership and nurse retention. For this study, the data came from National Sample Survey of Registered Nurses (NSSRN) 2018: (Reasons to Leave-Lack of good management or leadership), nurses' satisfaction (Satisfaction in primary nursing position), nurse burnout (Reasons to Leave- Burnout), and work environment in the workplace (Reasons to Leave- Stressful work environment). In this study, the analysis addressed whether management and leadership (independent variable) decreased or increased the variables of nurse satisfaction, work environment, and nurse burnout

(dependent variables) to determine how nurse retention is affected in the South Atlantic Division in 2018. In this study, the South Atlantic Division referred to Delaware, Washington DC, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia (U.S. Department of Health and Human Services, 2019). This study provided valuable insights and recommendations that may benefit health care leaders and policymakers, enabling them to establish effective strategies that enrich leadership practices, boost nurse retention rates, and foster a satisfying and fulfilling work environment for nursing professionals.

Research Questions

RQ1: Is there an association between nurses' intent to leave based on leadership and nurses' satisfaction in the South Atlantic Division of the United States in 2018?

H_o1: No significant relationship exists between nurses' intent to leave based on leadership and nurses' satisfaction in the South Atlantic Division in 2018.

H_a1: A significant relationship exists between nurses' intent to leave based on leadership and nurses' satisfaction in the South Atlantic Division in 2018.

RQ2: Is there an association between nurses' intent to leave based on leadership and nurses' intent to leave based on nurse burnout in the South Atlantic Division of the United States in 2018?

H_o2: No significant relationship exists between nurses' intent to leave based on leadership and nurses' intent to leave based on nurse burnout in the South Atlantic Division in 2018.

H_a2: A significant relationship exists between nurses' intent to leave based on leadership and nurses' intent to leave based on nurse burnout in the South Atlantic Division in 2018.

RQ3: Is there an association between nurses' intent to leave based on leadership and nurses' intent to leave based on a stressful work environment in the South Atlantic Division of the United States in 2018?

H_o3: No significant relationship exists between nurses' intent to leave based on leadership and nurses' intent to leave based on a stressful work environment in the South Atlantic Division in 2018.

H_a3: A significant relationship exists between nurses' intent to leave based on leadership and nurses' intent to leave based on a stressful work environment in the South Atlantic Division in 2018.

Theoretical Framework

This study included Herzberg's (1968) two-factor theory on work motivation as the theoretical framework. According to Herzberg, motivation and hygiene factors are the significant factors that influence employees' working attitudes and performance levels. According to Yusoff et al. (2013), motivation factors are intrinsic factors that increase job satisfaction, while hygiene factors are extrinsic factors that inhibit workforce discontent. Herzberg argued that the total supply of hygiene factors would not inevitably lead to job satisfaction, and highlighted the significance of addressing motivation factors because they lead to increased worker productivity (Herzberg, 1968; Yusoff et al., 2013). The two-factor theory stipulates that tackling individuals' lower level needs would not prompt

them to wield effort but would only constrain them from being discontented. However, the supply of higher level conditions (intrinsic or motivation factors) is needed to inspire workers (Rai et al., 2021). Nursing leaders should implement this theory because it helps to meet employees' extrinsic or hygiene factors, thereby preventing employees from becoming dissatisfied and ensuring they stay motivated to contribute positively to organizational performance (Herzberg, 1968; Rai et al., 2013; Yusoff et al., 2013).

In this study, leadership was the independent variable influencing hygiene factors and motivators within the work environment. With its focus on respect, advancement, and support, leadership aligns with motivators to foster job satisfaction (Almost & Mildon, 2022; Xuefeng, 2023). Conversely, nurses not being supported at work, not having a positive work environment, and lack of displayed commitment and dedication from the organization can impact job satisfaction (Dewanto & Wardhani, 2018; Senek et al., 2020). In the current study, the mediating variables were nurse job satisfaction, stressful work environment, and nurse burnout because they act as mechanisms by which leadership and management influence nurse retention. The outcome variable was nurse turnover intentions, depicting the inclination of nurses to stay or leave their current positions. I used Herzberg's two-factor theory as a theoretical framework to understand how leadership influences nurse satisfaction, organizational commitment, and turnover intentions. The framework offered a comprehensive lens to analyze the motivational factors that impact nurse retention and foster the development of effective strategies and approaches centered on nurse satisfaction and reducing turnover rates within health care institutions.

Nature of the Study

A quantitative cross-sectional design that included secondary data from the 2018 NSSRN was used in the study. According to X. Wang and Cheng (2020), cross-sectional studies are "observational studies that analyze data from a population at a single point in time" (p. 65). I analyzed secondary data to answer the research questions and achieve the study's objectives.

I examined whether management and leadership (independent variable) decreased or increased nurse satisfaction, work environment, and nurse burnout (dependent variables) to determine whether management and leadership affect nurse retention in the South Atlantic Division in 2018. Using a cross-sectional design aided in examining the relationship between leadership and nurse retention based on the data gathered from the NSSRN 2018. The study provided a snapshot of the nursing workforce's perceptions and examined potential issues linked to nurse retention. A cross-sectional design allowed for an analysis of data from a large sample, which provided a comprehensive overview of the current state of leadership and how it influences nurse retention.

One of the main advantages of a cross-sectional study is that it allows for efficient collection of data because information is gathered at a single point in time. Other advantages of a cross-sectional design, as illustrated by X. Wang and Cheng (2020), include a relatively quick and economical study, no ethical dilemmas, the ability to study multiple outcomes and exposures, ease of generating a hypothesis, and generating findings to ensure an in-depth study. On the other hand, cross-sectional designs have limitations. Cross-sectional designs do not establish causality because data are collected

at one point in time. Other weaknesses of the design include the inability to measure the incidence and explore the temporal relationship between outcomes and risk factors, and its susceptibility to biases such as recall and nonresponsive biases (X. Wang & Cheng, 2020). The secondary data set used in the current study, the 2018 NSSRN, was a valuable resource because it aided in investigating the health care workforce and the potential issues linked to nurse retention. The data set provided a wealth of information to study the current trends and challenges affecting nursing professions, thereby contributing to the discussion and potential policy changes to enhance nurse retention and improve health outcomes.

Literature Search

During the literature search process, I gathered relevant and credible information regarding the role of leadership and its impact on nurse retention. The search involved the use of keywords such as *nurse burnout, leadership styles, leadership, management styles, management, job satisfaction, hospital nurse leader retention, nurse leader intent to leave employment, nursing burnout,* and *nursing turnover*. The databases PubMed, CINAHL Complete, JSTOR, Google Scholar, EBSCO, National Institutes of Health (NIH), and Medline were selected as the primary sources for retrieving scholarly articles and research studies. In locating the appropriate scholarly sources for the study, I used highlighted keywords to ensure the study included only relevant and credible articles that fit the topic of study. The inclusion criteria were peer-reviewed articles published within the past 5 years. After identifying the relatable articles and journals, I performed an analysis and synthesis based on the associated themes of the literature. The systematic

review of the literature assisted in ensuring that the study was based on an inclusive and up-to-date assessment of existing literature in the nursing field.

Literature Review Related to Key Variables and Concepts

The literature review addressed the recent studies linked to burnout, nurse satisfaction, management and leadership in nursing, work performance, work environment, and physical well-being. There are several challenges, including but not limited to health care professional shortages, limited budgets, and increasing patient health care needs (Zhang et al., 2022). The highlighted themes played a significant role in the current study because there are various factors that lead to nurse retention. The review assessed how burnout is a predominant concern within health care settings. Moreover, the study examined the association between leadership and job satisfaction, burnout, well-being, and work environment.

The physical well-being of nurses, including their physical health and work-related injuries, is an essential factor in their overall quality of life. Another critical indicator the review assessed is work performance, which encompasses productivity, patient outcomes, and quality of life. By reviewing the existing studies on the highlighted themes, I provided insights into the relationships, knowledge gaps, and trends, thereby contributing to the formulation of evidence-based strategies and interventions tailored to ensure the well-being of nurses and optimize health care delivery.

Burnout

Numerous studies highlighted the significance of burnout research (Chen & Chen, 2018; Guo et al., 2022; Spence Laschinger et al., 2022). According to Chen and Chen

(2018, as cited in Kelly et al., 2021), burnout is treated as a consequence deriving from stressful work conditions (e.g., excessive work demands) and is a syndrome consisting of feelings of emotional exhaustion, cynicism, and a lack of professional accomplishment. Chen and Chen (2018) proposed that burnout among the workforce may lead to adverse work-related effects such as low organizational commitment, job dissatisfaction, and high employee turnover. Shaffer and Curtin (2020) explored the most effective ways for leaders to enhance job satisfaction and avoid burnout within the nursing profession and found that leadership demonstrated a positive correlation with job satisfaction among qualified staff nurses while highlighting the relationship between a positive work environment and burnout.

In another study, Guo et al. (2022) revealed that perceived overqualification was positively correlated with burnout. Additionally, Chen and Chen (2018) used structural equation modeling and hierarchical regression analysis to explore the background and consequences of nurses' burnout. The study established a positive causal relationship between job stressors and nurses' burnout, while supervisor support was negatively associated with burnout. Chen and Chen stressed the significance of supportive supervisors and effective leadership in mitigating nurses' burnout. After reviewing 18 articles published from 2010 to 2019, Wei et al. (2020) established that nurse burnout is a global phenomenon that can be mitigated through effective nurse leadership. Wei et al. identified that leaders can be effective in addressing the issue of nurse burnout within health organizations. Wei et al. also noted that competent nursing leaders can support and engage nurses by fostering a healthy work environment to alleviate nurse burnout. The

findings by Shaffer and Curtin (2020), Chen and Chen, Guo et al., and Wei et al. underscored the substantial role of leadership in nurse job satisfaction, burnout prevention, and overall well-being. The studies also emphasized the prominence of supportive supervisors, effective leadership strategies, and the utilization of nurses' qualifications in upholding nurse well-being and enhancing organizational performance (Shaffer & Curtin, 2020; Chen & Chen, 2018; Guo et al., 2022).

Management Leadership Styles

Numerous studies explored the impact of leadership styles on nurse turnover intentions and the factors contributing to nurses' decision to leave their positions. Suliman et al. (2020) examined the impact of nurse managers' leadership styles on predicted nurse turnover and found a significant impact of various leadership styles on nurse turnover intentions. In particular, transformational leadership, characterized by inspirational motivation and idealized influence, positively influenced reducing nurse turnover intentions. On the other hand, the laissez-faire leadership style depicted a lack of active leadership and involvement, which led to higher nurse turnover intentions. Naseer et al. (2018), Magbity et al. (2020), Suliman et al., and Uslu Sahan and Terzioglu (2022) proposed that adopting transformational and transactional leadership approaches could help nurse managers to establish a positive work environment, inspire nurse job satisfaction, and decrease the likelihood of nurses leaving their positions.

Another descriptive correlational study by Magbity et al. (2020) revealed that nurses predominantly practiced participative and transformational leadership styles. Naseer et al. (2018) supported these findings because they demonstrated a negative

correlation between participative and transformational leadership styles and turnover intentions, highlighting that the leadership styles lessen the probability of nurses with the intention of leaving their positions. On the contrary, autocratic and laissez-faire leadership styles, according to Magbity et al., increased the likelihood of nurses considering turnover. Naseer et al. proposed the significance of effective leadership practices, especially those characterized by involvement, support, and inspiration, in retaining nurses and promoting organizational stability.

Management and Leadership

Nursing leadership refers to an interaction that deals with the health care system at different levels ranging from the microsystem, including individual patient care units, to the macrosystem, including health care organizations and their policies on a broader scale, while considering different characteristics of the system, including clinical practice and disciplinary characteristics and valuing, establishing, and maintaining these characteristics to make advancements in nursing theory and practice. The development of nursing leaders is considered one of the most essential strategies in the transformation of health care services because effective leaders can help nurses improve their practice-related behaviors and administer self-efficacy. Considering these points in nursing leadership, leaders have been found to have a critical role in balancing the health care system, the patient, and the nursing staff, maintaining a high level of patient care service by helping nursing personnel so that the service can be reliable and efficient, and improving the organization's excellence (Zhang et al., 2022). Zhou and Zhang (2022) noted that good ethical leadership can help increase nurses' connections with their health

care institutions. Excellent and ethical leadership promotes a safe and comfortable working environment that can support the well-being of people (Jenkins et al., 2022).

Nurse Satisfaction

Studies have revealed that nurse satisfaction has a significant impact on nursing retention because nurses who demonstrate job satisfaction are likely to stay in their current positions and remain dedicated and loyal to their organization. In a systemic review that focused on the UK National Health Service labor force and its relationship with satisfaction, retention, and wages, Bimpong et al. (2020) highlighted the interconnection between job satisfaction and wages because wage increment alone does not address retention concerns. In a similar study by Putra et al. (2020), the systemic review of the literature exemplified that nurse turnover is linked to low job satisfaction and organizational commitment. Uslu and Terzioglu (2022) investigated the impact of various factors, particularly job satisfaction, on nurse retention and found that job satisfaction significantly predicted nurse retention. Uslu and Terzioglu proposed that health care organizations should prioritize strategies that enhance nurse satisfaction as a means to improve retention rates. Guo et al. (2022) added that nurses who reported higher levels of satisfaction with their work experienced lower levels of burnout, leading to increased retention within the profession.

Kelly et al. (2019) conducted a systemic review examining how poor leadership impacts nurse burnout in 29 hospitals and found a positive correlation between poor leadership and nurse job satisfaction and burnout. Leadership dimensions such as idealized influence, intellectual stimulation, and inspirational motivation are crucial in

enhancing nursing job satisfaction (Alzahrani & Hasan, 2019). Alzahrani and Hasan (2019) found that more experienced leadership could boost job satisfaction and nurse retention in medical settings. As illustrated by Kelly et al. (2019), Dewanto and Wardhani (2018), and Senek et al. (2020), ensuring nurse satisfaction, including factors such as job satisfaction, salary, and organizational commitment, helps to create a positive work environment crucial for health institutions to enhance a conducive work environment, enhance nurse retention rates, and promote the stability and quality of patient care.

Physical Well-Being

Effective leadership can be positively related to better patient outcomes because of the improved quality of health care services that can be attributed to the improved well-being of the health care workforce (Cummings et al., 2021). In this regard, Zhang et al. (2022) conducted semistructured interviews with nurse leaders and nursing staff and found that good and caring leadership helps health care providers go beyond their work routines so that they can maintain a good work–life balance that will positively affect their physical well-being. In the presence of such leadership, the interpersonal relationship between leaders and staff improves because leaders show genuine concern for staff, giving due consideration to their daily lives, including their rest and feelings of illness (Zhang et al., 2022)

Bogue and Carter (2022) supported these findings by assessing the Nurse Wellbeing Self-Assessment in the context of leadership influence on the well-being of nurses. Bogue and Carter conducted a study on survey data obtained from 1,394 nurses and reported that leadership can be linked to the optimal well-being of nurses, in which

different variables such as nourishment, rest, and security may be considered. In another study, Carter and Bogue (2022) assessed the importance of leadership in the well-being of the health care workforce during the COVID-19 pandemic and reported that leaders can help improve the well-being of the health care workforce by working on several domains of life, including those related to biophysical, sociorelational, psycho-emotional, and religio-spiritual, and a lack of good leadership can be associated with a lack of well-being related to these domains. In the religio-spiritual domain, leaders can arrange events related to whole-person care and wilderness activities that can help improve well-being. In a sociorelational context, a leader's help in increasing an individual's sense of belonging and decreasing barriers to quality care can improve well-being. Good leaders can also help improve well-being by reducing pressure on health care workers and providing them with employee assistance programs and team commitment. Eventually, leaders can help improve biophysical well-being by reducing patient loads, improving work–life balance, and increasing staffing (Bogue & Carter, 2019; Carter & Bogue, 2022; Jarden et al., 2020). Health care institutions should practice effective leadership practices that prioritize the well-being of nurses because this can influence nurses' retention and overall satisfaction.

Work Environment/Performance

Nursing leadership has been found to be important in contributing to positive outcomes for nursing professionals. For instance, leadership has been positively related to several variables including job satisfaction and nurses' intention to keep providing their services in the nursing profession (Cummings et al., 2021). In line with these effects of

positive leadership on the nursing workforce, El-Gazar et al. (2022) reported the proactive work-related behavior of nurses in the presence of humble and good leadership. El-Gazar et al. conducted a cross-sectional descriptive study to determine the effect of humility and good leadership on the proactive behavior of the nursing workforce. El-Gazar et al. surveyed 316 nurses regarding leadership humility, proactive work-related behavior, and psychological empowerment and found that these variables were positively and significantly correlated, showing that humility and good leadership can help in improving proactive work-related behavior that can be mediated by the psychological empowerment of nurses.

In the absence of good leadership, burnout or stress among nurses can be increased, which can negatively affect patient safety outcomes in the form of unwanted patient incidents and medication errors (Cummings et al., 2021). Even though nursing leaders and managers can influence nurses, leadership behaviors may not always influence nurses' perceptions. For example, Ozkan et al. (2022) reported that nurses who show willingness to give services as nurses are relatively less influenced by toxic leadership. Moreover, nurses with a high level of education and good in-service training are less influenced by toxic management and leadership (Ozkan et al., 2022). Ozkan et al. concluded that working with toxic managers and leaders did not significantly influence the professional values held by nurses. However, it is essential to consider that toxic leadership can affect work performance by affecting professional values (Ozkan et al., 2022). After conducting a cross-sectional, multicenter study on registered nurses, Ofei et al. (2022) supported this implication and noted that even though toxic leadership can

affect the productivity of nurses, leaders showing a considerable lack of self-control significantly affected their productivity.

Definitions of Terms

Leadership: The "art of persuading your colleagues or followers to attain their maximum potential in accomplishing any task, objective, or project" (Specchia et al., 2021, p.1).

Nurse intent to turnover: "The thought process encompasses the decision of nursing professional contemplating leaving their current job within the next six months" (Majeed & Jamshed, 2020, p.236).

Nurse manager: "An individual who directly supervises the supportive staff and has responsibility for planning, organizing, controlling, and allocating numerous resources to meet organizational needs. A nurse establishes action plans, sets operational goals, solves problems, and monitors results" (Galura, 2020, p.479).

Nurse retention: "Nurse staff's intention to continue executing their roles and responsibilities at a healthcare facility to provide high-quality care with happiness and job satisfaction" (McCay et al., 2019, p.365).

Nurse job satisfaction: "The perceptions of individual nurses regarding their job and work experience" (Khairunnisa & Nadjib, 2019, p. 466). "It connects with nursing individual work turnover, patient satisfaction, service quality, and effectiveness" (Lei et al., 2022, p. 652).

Assumptions

Several assumptions have been considered when exploring leadership's impact on nurse retention. These assumptions are critical since they provide a foundation for the study and shape the direction of the research. The study assumes that leadership, including behaviors, characteristics, and approaches, have varying effects on nurse retention. Leadership can positively or negatively influence the decision of nurses to stay in their positions or leave the organization. Moreover, it is assumed that nurse retention is multifactorial due to factors such as work environment, job satisfaction, and compensation playing a role in nurse retention. Based on this assumption, leadership interacts with multiple factors to impact nurse retention. It is assumed that leadership can be identified, measured, and categorized using established leadership frameworks and theories, such as validated instruments or surveys. This assumption is that leadership can be quantitatively analyzed and classified because of observable behaviors and characteristics. Finally, the assumption that nurse retention is a desirable outcome in health organizations. Thus, retaining highly skilled and competent nurses can improve patient care quality, organizational stability, and continuity of care.

According to the U.S. Department of Health and Human Services (2019) it is assumed that the data entry and collection of data were efficient and had very few errors. The NSSRN study is a valid and reliable cross-sectional study (U.S. Department of Health and Human Services, 2019). The participants in the study answered all the questions truthfully and with little to no persuasion. By examining these assumptions, studies can be implemented and explored to determine the mechanisms through which

leadership impacts nurse retention and recognize strategies to enrich nurse retention through effective leadership.

Scope and Delimitations

The scope of the study on the role of leadership and its effect on nurse retention centers precisely on probing the relationship between leadership and nurse retention. It explored leadership and how it influences nurses' job satisfaction, organizational commitment, and overall retention rates. Primarily, the study investigated nurses working in the South Atlantic Division in the United States in 2018. Thus, the generalizability of the findings to other professions or industries could prove challenging. Moreover, the scope of the study may also depend on self-reported data from nurses, which could introduce response biases or limitations related to subjective perceptions. Contrariwise, the delimitations of the study encompass the exclusion of other factors that might impact nurses' intent to stay or leave, such as organizational culture, workload, or career development opportunities, which could be potential future research areas.

Limitations

While conducting this study, the various limitations, challenges, and barriers must be addressed. In Section C of the survey, the question asked nurses the reasons for why they would leave their nurse profession and respondents could have chosen more than one response. The study does not compute results for multiple responses only each response individually. Recruitment of a sufficient number of nurses to participate in the study proved challenging as accessibility to participants can be a significant limitation. Nurses are usually busy professionals and have limited time to participate in research.

Also, inferring from missing data collected in the study is challenging. Moreover, based on the scope of the study, required access to variables that could have added value but were not included in the dataset. Another limitation is that the study was collected on October 12, 2018, almost six years ago, which means that information and answers have potentially changed. Analyzing leadership and nurse retention could not have been studied in the South Atlantic Division. The result from this study is not generalizable amongst other divisions, and other divisions would need to be analyzed to determine nurses' perceptions of leadership. Required approval from relevant authorities to obtain such data and, at the same time, ensure we adhere to strict data protection and privacy protocols. Also, the researcher must consider separating roles and ethical considerations since maintaining confidentiality and anonymity is vital to safeguarding participants' privacy and ensuring the study's ethical conduct.

Significance of the Study and Potential for Social Change

The study on the role of leadership and its influence on nurse retention portrayed crucial significance for the nursing profession and healthcare organizations at large. In particular, the study examined the factors related to nurse retention and the role of leadership, and this can assist healthcare leaders in establishing targeted strategies to enhance retention rates and create an increasingly stable and engaged nursing workforce. Also, the research provided valuable insights that guide the development and improvement of leadership training programs. As health institutions continuously adapt and evolve to the changing societal needs, effective leadership focused on warranting optimum quality of care, as well as creating a supportive and conducive environment for

nurses. The study findings helped healthcare leaders fully grasp the role of leadership on nurse retention and thus make evidence-based decisions to increase employee satisfaction and well-being. Ultimately, this study can instigate and inspire positive social change by promoting effective leadership and nurturing a healthier and increasingly sustainable healthcare workforce.

Summary and Conclusion

As elucidated, the chapter highlights the aim of exploring the role of leadership in influencing nurse retention within healthcare organizations. For instance, good leadership can administer self-efficacy to nurses and improve their well-being and work-related behavior. Leaders improve the well-being of nurses by working on various domains, including those related to biophysical, socio-relational, psycho-emotional, and religio-spiritual. In the presence of good leadership, stress on nurses can be reduced, which is beneficial for them in working proactively. The work performance of nurses also improves when they feel they have the full support of their leaders and are also achieving a high level of work-life balance. It exemplifies the issue of nurse turnover and its damaging impacts on patient care, cost of care, and the well-being of nursing professionals. Frederick Herzberg's two-factor theory is the theoretical framework that guided this study and emphasized motivation and hygiene factors in the workplace. The study employed a quantitative cross-sectional design using secondary data from the 2018 National Sample Survey of Registered Nurses. The literature review provided valuable insights and recommendations to healthcare leaders and policymakers to adopt leadership practices with the potential to boost nurse retention rates.

Section 2: Research Design and Data Collection

The purpose of this quantitative cross-sectional study was to analyze the correlation between management/leadership (independent variable) and nurses' satisfaction, nurse burnout, and work environment (dependent variables), to determine how management/leadership affects nurse retention. The findings may assist health care organizations in developing more engaging retention strategies and reducing the stress of the health care workforce. Section 2 consists of data collection, sampling, research design, threats to validity, operationalization, ethical considerations, and a summary.

Research Design and Rationale

The study variables consisted of management and leadership (independent variable) and nurses' satisfaction, nurse burnout, and work environment (dependent variables). Before the survey, invitations to participate were made, followed by reminders as many as eight times to increase the chances that all of the sampled respondents would participate. The respondents were allowed to respond to the questions using web-based instruments and paper questionnaires. The respondents of the survey who were RNs used staffed questionnaires conducted via telephone lines by census telephone interview agents. The respondents who were RNs had to log in before participating; therefore, technical professionals assisted them with login and language support. The research design choice was consistent with the research design needed to advance the knowledge of the discipline by examining knowledge from professionals currently in the industry as nurses and nurse practitioners. The detailed account from the surveys provided the information needed to test the hypotheses based on the literature review.

Methodology

Population

The initial sample size of registered nurses and nurse practitioners was 50,273; however, I focused on the South Atlantic Division, which had a population of 8,143 registered nurses and nurse practitioners. Data from Section B and C of the survey were analyzed.

Sampling and Sampling Procedure

I used the NSSRN (2018) dataset. The cross-sectional design aided in exploring the relationship between leadership and nurse retention based on the data gathered from the NSSRN. This data were publicly available without requesting for consent. Written consent can be provided, though not needed. I included the correspondence from the Health Resources and Services Administration (see Appendix). Because I used the entire respondent population from the South Atlantic Division of the NSSRN data set, the sampling procedure was not used for this study. The data were collected by NSSRN 2018, which used a random sampling procedure to collect the license data on registered nurses. Because I used the data from the NSSRN 2018 data set, it is possible to claim that the data on participants included in the current study were randomly sampled.

The data set included registered nurses and nurse practitioners in the same study because 2018 was the first year the survey was revamped compared to the 2008 NSSRN and 2012 NSSNP. The survey included an extended section for nurse practitioners (Section I) along with new concept structures throughout the survey. The results included

nurse practitioners and registered nurses from all 50 states with a vast collection of hospitals and medical centers encompassing several different organizations.

Data Collection Tools

The 2018 NSSRN is a national survey that informs public and private organizations and explores the health care workforce and potential issues that have arisen. The NSSRN 2018 survey was the largest survey of registered nurses in the United States (U.S. Department of Health and Human Services, 2019). The NSSRN is a way to be informed and disseminate information on the health care workforce trends and potential changes that should be discussed. The NSSRN 2018 was distributed by the U.S. Census Bureau, which is different from the 2012 NSSRN survey sent by the Human Resources and Services Administration. The U.S. Census Bureau staff monitored the printing and assembly of the NSSRN questionnaires to ensure quality. The bureau's Person Identification Validation System was used to assign unique person identifiers to highlight duplicate files across the state records. The NSSRN collects information on how the health care workforce is changing, the landscape, and the characteristics of nurses such as education, employment, evolving demographics, and career patterns. The survey questionnaire for 2018 was revised from the 2008 questionnaire to address current issues and trends in health care in the nursing workforce. The data collection consisted of eight tries to obtain responses; the responses were collected by internet, paper, and telephone.

The data set was collected over a period of 6 months from April 30, 2018, to October 12, 2018. Individuals participating were sent up to eight reminders to submit the

survey, which allowed multiple methods to submit. The data collection for the NSSRN occurs every 4 years. The 2018 NSSRN used various methods to approach data collection. Using the National Council of the State Board of Nursing and individual state boards of nursing, the 2018 NSSRN obtained contact information and licensing information. The U.S. Census Bureau incentivized certain groups compared to others depending on the group. A letter invited registered nurses to complete a survey via the web, and paper surveys were sent via postal mail shortly after the web invitation. Finally, registered nurses who did not respond were contacted by telephone and expedited mail.

Justification for the Effect Size, Alpha Level, and Power Level Chosen

The U.S. Census Bureau removed ineligible records from the sampling frame to eliminate redundancy and errors. Such records included information on nurses who had passed away, nurses whose licenses had expired before the first month of 2016, and duplicate information received from the boards of nursing of the respective states. After the ineligible data were removed, the sampling frame contained 4,485,011 records. There were 1,407,003 records of multiple entries of nurses holding multiple licenses within or across states. Unique records were used to distinguish nurses with multiple licenses for the two strata. The tanking of the license states was used to determine the records that would be appropriate for a given nurse, with such a nurse assigned to the state with the fewest number of nurses. After the duplicate records were removed, the sample size decreased to 3,651,311 distinguished records.

The license state variables that failed to match with the state file from which the records were obtained were reassigned to match the state file from which the record was

received. For instance, nurses living in Alaska or Hawaii were assigned to the license state matching the state of their residence. The sample size was estimated by the response rates from the surveys that had been completed and the estimated number of licensed nurses in each state. The response rate for each state was expected to be similar to the one recorded in previous years. The minimum sampling rate and the margin of error were set so that the overall sample size approached 100,000. States with a margin of error of 0.041 were given more priority than the ones with a design of the lowest standard of error nationally.

The number of states sampled with a minimum sampling rate was only two in the first stratum. The alpha level is a sampling rate to ensure an estimate of (.05) 50% at a 95% confidence level (U.S. Department of Health and Human Services, 2019). The alpha level was chosen to reduce Type I error, while the power level of 80 was chosen to reduce type II error.

Each sampling strata sorted the sampling frame by demographic factors such as age, racial affiliation, zip code, sex, and ethnicity. This selection criteria aimed to improve the distribution of the variables in the sample while decreasing the variance of the survey estimates. While reviewing the initial sample, I noticed 1,500 nurses had no address (see U.S. Department of Health and Human Services, 2019).

Each case was assigned an outcome code after the data collection process was completed. The outcome codes were either complete returns, eligibility unknown, or ineligible. Complete returns were recorded as the respondents who answered three critical items and at least 50% of at least one subset of 28 questions (U.S. Department of Health

and Human Services, 2019). Eligible cases qualified as complete returns as those who resided in the United States and had an active license during the survey period. Potential respondents who refused or failed to complete the survey were not assessed for eligibility.

Operationalization of Constructs

Quality assurance and control in a quantitative study refers to following the rules in terms of the reliability and validity of data. I used the representative sample (registered nurses and nurse practitioners), which reflected the target population. Nurse Practitioners were included in this study along with registered nurses in the South Atlantic Division. By using the sample recruited by a reputable agency, I prevented researcher bias. The NSSRN 2018 used standardized data collection instruments that provided necessary transparency and maintained internal validity. The data generated by the NSSRN 2018 were collected by trained personnel, facilitating consistency and accuracy in data collection procedures. Data validation checks to identify and correct errors during data entry were performed by NSSRN 2018. The reliability and validity of the data were checked as well. I used appropriate statistical techniques based on the research objectives and the nature of the data. I used Statistical Package for the Social Sciences (SPSS) Version 29 for data analysis.

Operationalization

Nurses' satisfaction, work environment, and nurse burnout determined how nurse retention was affected. Nurses who were ineligible for the survey were those who did not have an active registered nurse license as of December 31, 2017, were deceased, did not

live in the United States, and were terminally ill or institutionalized. The NSSRN (2018) survey consisted of approximately 150 questions sent to understand the landscape of the health care workforce throughout varying health care facilities in the United States from the nursing perspective. I examined three of the 150 questions aligned with nurse retention and job satisfaction. The three questions, which were labeled B24, D1, and D3. Independent variables consisted of management leadership and dependent variables included nurses' satisfaction, nurse burnout, and work environment to determine how management leadership affects nurse retention. Table 1 outlines the variable name from the study, scale of the variable, definition of the variable, and what the variable measured. The scale of the variables of management/leadership, nurse burnout, and work environment in the data set were categorical or nominal variables using "yes" or "no" as an answer. The scale of the variable of nurse satisfaction was an ordinal variable because it included a rank and numeric value.

Table 1

Description of Variables

Variable	2018 NSSRN variable name	Description	Value
Management and leadership	RE_LVE_GDMNG	REASONS TO LEAVE - LACK OF GOOD MANAGEMENT OR LEADERSHIP	1 = YES 2 = NO
Nurse satisfaction	PN_SATISFD	SATISFACTION IN PRIMARY NURSING POSITION	1 = EXTREMELY SATISFIED 2 = MODERATELY SATISFIED 3 = MODERATELY DISSATISFIED 4 = EXTREMELY DISSATISFIED
Nurse burnout	RE_LVE_BRNOUT	REASONS TO LEAVE - BURNOUT	1 = YES 2 = NO
Work environment	RE_LVE_STRSSWE	REASONS TO LEAVE - STRESSFUL WORK ENVIRONMENT	1 = YES 2 = NO

Proposed Data Analysis Plan

In the study, registered nurses and nurse practitioners were evaluated on their intent to leave their primary nursing position and the reasons associated with leaving. The total sample of 50,273 registered nurses and nurse practitioners answered the study; however, only the South Atlantic Division was analyzed. I analyzed questions from Section B and Section C, which consisted of registered nurses and nurse practitioners. Additionally, the analysis consisted of the South Atlantic Division only, which has 8,143 registered nurses and nurse practitioners which was the population for the study.

The first step was to use SPSS Version 29 to analyze the data. The initial step for statistical analysis was the computation of descriptive statistics (e.g., mean, median, standard deviation) to summarize the main characteristics of the data. After the frequency tables and pie charts for categorical and ordinal variables were generated, the next step was to conduct inferential statistical analysis. The hypotheses and research questions were used as guidance. I decided to use the multivariate logistic regression analysis and simple linear regression, which analyzed the *t* tests to determine the validity of the hypotheses. I used these tests to determine the levels between independent and dependent variables. The power analysis was conducted to determine the required sample size for the study based on effect size, alpha level, and desired power level. The data were interpreted by checking the assumptions of selected statistical tests and addressing violations, if necessary. I conducted multiple tests or comparisons with adjusting to comparisons to control for Type I error. The results are reported using tables and figures, followed by explanations of how the findings answered the research questions.

Research Questions and Hypotheses

RQ1: Is there an association between nurses' intent to leave based on leadership and nurses' satisfaction in the South Atlantic Division of the United States in 2018?

H_o1: No significant relationship exists between nurses' intent to leave based on leadership and nurses' satisfaction in the South Atlantic Division in 2018.

H_a1: A significant relationship exists between nurses' intent to leave based on leadership and nurses' satisfaction in the South Atlantic Division in 2018.

RQ2: Is there an association between nurses' intent to leave based on leadership and nurses' intent to leave based on nurse burnout in the South Atlantic Division of the United States in 2018?

H_o2: No significant relationship exists between nurses' intent to leave based on leadership and nurses' intent to leave based on nurse burnout in the South Atlantic Division in 2018.

H_a2: A significant relationship exists between nurses' intent to leave based on leadership and nurses' intent to leave based on nurse burnout in the South Atlantic Division in 2018.

RQ3: Is there an association between nurses' intent to leave based on leadership and nurses' intent to leave based on a stressful work environment in the South Atlantic Division of the United States in 2018?

H_o3: No significant relationship exists between nurses' intent to leave based on leadership and nurses' intent to leave based on a stressful work environment in the South Atlantic Division in 2018.

H_a3: A significant relationship exists between nurses' intent to leave based on leadership and nurses' intent to leave based on a stressful work environment in the South Atlantic Division in 2018.

Threats to Validity

No threats to internal or external validity was observed. This study included a large representative sample of registered nurses, proving the results' high level of generalizability. The internal validity was maintained by using standardized instrumentation and complying with the initial purpose, research questions, and hypotheses. Since a credible agency collected the data, the internal consistency of this study is supported.

Ethical Considerations

Every research is characterized by various ethical issues associated with recruitment materials and processes. The data was adopted from the 2018 NSSRN survey; therefore, it was challenging to establish whether data sharing was restricted in the initial consent form. Potential ethical concerns emanated from the fact that this consent form may not specify how the data would be utilized in future studies. Scrutinizing original consent forms and recruitment materials must be undertaken to determine the need to consult with the ethics committee or the institutional review board. In completion of this study, it was assumed that no ethical loopholes were likely to have occurred due to the seriousness of the survey and the fact that the research was conducted under the supervision of the bureau.

Notably, the 2018 NSSRN is readily available on the internet and open for utilization in subsequent studies. To uphold fundamental ethical requirements, the researchers has acknowledged this use. According to Tripathy (2013), current technology makes it easier to breach security and confidentiality protocols when using such information. For this study, keen considerations were made to avoid the slightest forms of ethical breaches.

This study analyzed a secondary dataset examining key variables collected in the 2018 NSSRN survey. I had no direct contact with participants nor conducted any primary analysis in the allocation of research in this study, and all participants were anonymous. Walden University granted IRB approval: 01-12-24-1040208, which was obtained for this study on January 12, 2024.

Summary

In this chapter, the research design, methodology, sampling, and sampling procedures, as well as the operationalization of the constructs were highlighted. This study used a quantitative cross-sectional research design by utilizing the sample from 2018 NSSRN. The sample consisted of registered nurses and nurse practitioners who had provided their information willingly and confidentially to a reputable agency. The survey instruments was validated by the 2018 NSSRN. The data analysis requires using the SPSS package 29 version by calculating descriptive statistics and inferential statistics. In the next section, section 3, consisted of the results and findings conducted by SPSS. It also detailed the relationships between the independent and dependent variables.

Section 3: Presentation of the Results and Findings

The purpose of this quantitative cross-sectional study was to examine the relationship between leadership and nurses' intent to leave their profession. The topics discussed in Section 3 consist of data collection of the secondary data set, the results of the findings, and a summary. The results in this section were developed to provide answers to the research questions. The decisions to reject the null or alternative hypotheses were based the correlation between nurses' intent to leave based on leadership and nurse satisfaction, nurses' intent to leave based on nurse burnout, and nurses' intent to leave based on a stressful work environment.

The first research question asked whether there is an association between nurses' intent to leave based on leadership and nurses' satisfaction in the South Atlantic Division of the United States in 2018. The hypotheses indicated that either a relationship does not exist or does exist between nurses' intent to leave based on leadership and nurses' satisfaction in the South Atlantic Division in 2018. The second research question asked whether there is an association between nurses' intent to leave based on leadership and nurses' intent to leave based on nurse burnout in the South Atlantic Division of the United States in 2018. The hypotheses indicated that either a relationship does not exist or does exist between nurses' intent to leave based on leadership and nurses' intent to leave based on nurse burnout in the South Atlantic Division in 2018. The third research question asked whether there is an association between nurses' intent to leave based on leadership and nurses' intent to leave based on a stressful work environment in the South Atlantic Division of the United States in 2018. The hypotheses indicated that either a

relationship does not exist or does exist between nurses' intent to leave based on leadership and nurses' intent to leave based on a stressful work environment in the South Atlantic Division in 2018.

Data Collection of Secondary Data Set

The secondary data were collected between April 30 and October 12, 2018; respondents were invited to participate in surveys. These data were analyzed based on a few attributes affecting nurses at the workplace, such as management/leadership, stress, burnout, and work environment. A sample of 50,273 registered nurses was selected from a load of files from individual state boards of nursing and the National Council of the State Boards of Nursing. I analyzed questions from Section B and Section C, which consisted of registered nurses and nurse practitioners, with a focus in the South Atlantic Division, which consisted of 8,143 registered nurses and nurse practitioners. Usually, most states provide the National Council of the State Boards of Nursing with the nursing data; however, some states may provide their data directly to the U.S. Census Bureau. Notably, licensing data from the newly licensed and new graduates from the nursing schools were not included because the U.S. Census Bureau collected all the data for the NSSRN 2018 until the end of December 2017.

The data collection participants included nurse practitioners and registered nurses because this was the first year the survey was revamped compared to the 2008 NSSRN and 2012 NSSNP. The results of the 2018 NSSRN included nurse practitioners and registered nurses from all 50 states with a vast collection of hospitals and medical centers encompassing several different organizations. However, for the purpose of the current

study, the South Atlantic Division was analyzed with a sample size of 8,143 registered nurses and nurse practitioners. The sample size was determined based on the response rates from the surveys that had been completed and the estimated number of licensed nurses in each state. The response rate for each state was expected to be similar to the surveys recorded in recent years.

Results

I conducted a crosstabulation table to compare the results of the number of registered nurses who responded to the survey (50,273) and the different divisions that the U.S. Census Bureau created to differentiate the results from each section of the United States. As shown in Table 2, the U.S, Census Bureau created nine divisions: New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific. In Table 2, the crosstabulation table shows the number of responses in each division based on the nurses' respondents. Figure 1 depicts the responses in each division based on the nurses' responses. This study focused on the South Atlantic Division (D5), which consisted of 8,143 registered nurses, which accounted for 16.20% of the population from the survey.

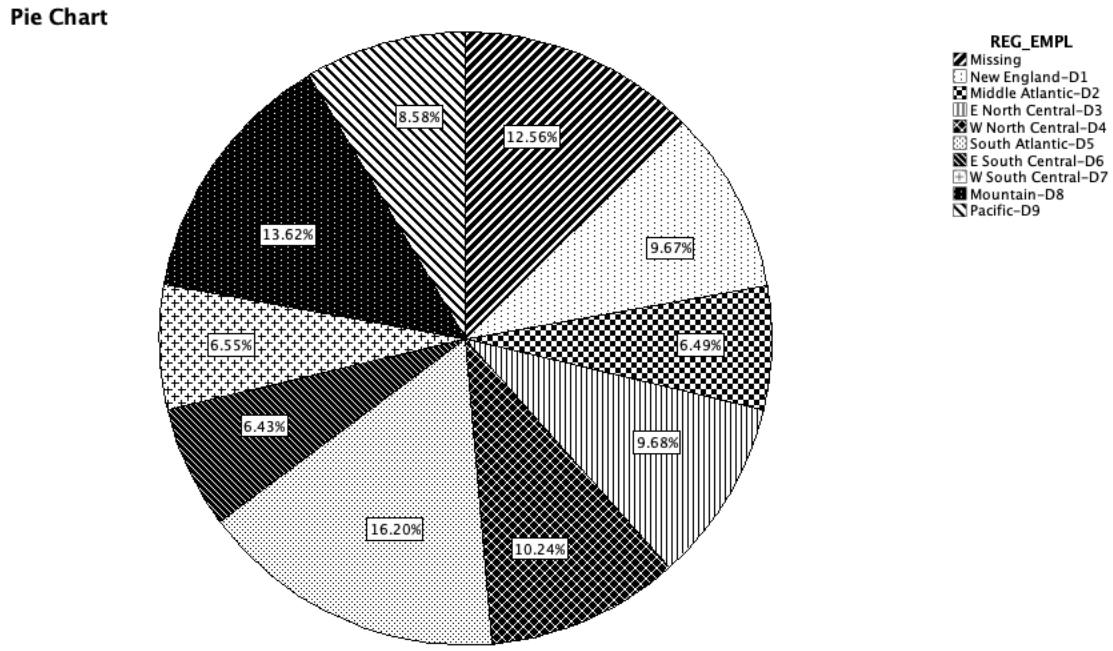
Table 2

Crosstabulation of Total Number of Nurses Nurses Within All Divisions

	REG_EMPL			
Division	Frequency	Percentage	Valid percentage	Cumulative percentage
D1	4,859	9.7	9.67	9.67
D2	3,265	6.5	6.49	16.14
D3	4,864	9.7	9.68	25.82
D4	5,147	10.2	10.24	36.06
D5	8,143	16.2	16.20	52.26
D6	3,231	6.4	6.43	58.69
D7	3,293	6.6	6.55	65.24
D8	6,845	13.6	13.62	78.86
D9	4,313	8.6	8.58	87.44
Missing	6,313	12.6	12.56	100.0
Total	50,273	100.0		

Figure 1

Pie Chart Illustrating the Crosstabulation of Total Number of Nurses Nurses Within All Divisions



Tables 3 and 4 provided the descriptive statistics of the dependent variable of nurses' satisfaction. In Question B24 of the questionnaire, the respondents were asked the degree of satisfaction they had with their place of work as of December 31, 2017. The dependent variable was coded as PN_SATISFD with four responses: 1 = extremely satisfied, 2 = moderately satisfied, 3 = moderately dissatisfied, and 4 = extremely dissatisfied. There was 100% of responses for this question, with most participants selecting 1 or 2, indicated being satisfied at over 44% each. The other responses were 3 (7%) and 4 (2%). The mean of nurses' satisfaction was 1.68, with a variance of .503.

Table 3

Descriptive Statistics of Nurses Satisfaction in Primary Position D5

	PN_SATISFD	
N	Valid	8,143
	Missing	0
Mean		1.68
Std. deviation		.709
Variance		.503
Range		3
Minimum		1
Maximum		4

Table 4

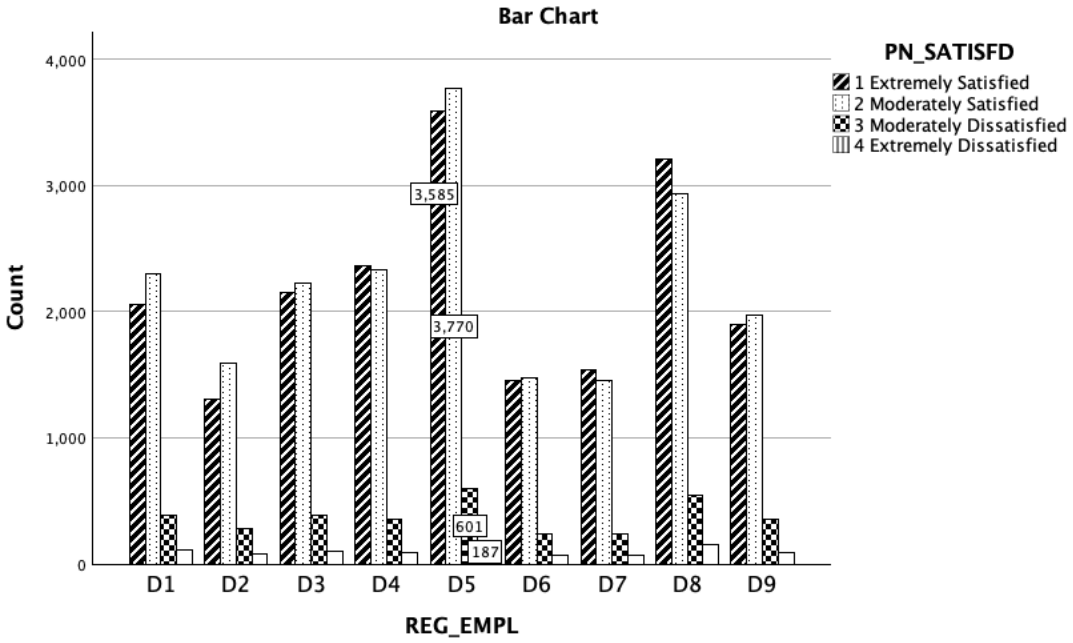
Descriptive Statistics of Nurses Satisfaction in Primary Position D5

PN_SATISFD			
Category		Frequency	Percentage
Valid	Extremely satisfied	3,585	44.02
	Moderately satisfied	3,770	46.30
	Moderately dissatisfied	601	7.40
	Extremely dissatisfied	187	2.30
Total		8,143	100.0

Figure 2 shows how the nurses' satisfaction was ranked throughout the survey for the South Atlantic Division (D5). A conversion was made from the number of respondents to percentages. Most selected 1 at 44.02% and 2 at 46.30%, while 3 and 4 were less than 10% each.

Figure 2

Bar Chart Illustrating Nurses Satisfaction D5



Tables 5 and 6 detail the descriptive statistics of the independent variable, reasons to leave-lack of good management or leadership. In Question D3 of the questionnaire, the respondents were asked which reason would contribute to them leaving their primary nursing position. The independent variable was coded as RE_LVE_GDMNG with two responses: 1 = yes, and 2 = no. The respondents were asked their reasons for leaving because of a lack of good management and leadership. The independent variable's responses were over 3,800, a little over 46%. However, there were over 4,300 missing responses (53%). The missing values were not factored into the data analysis. Most of the respondents said "no" at 29%, while those who stated "yes" were 17%.

Table 5

Descriptive Statistics of Reasons to Leave-Lack of Good Management and Leadership D5

RE_LVE_GDMNG		
N	Valid	3,823
	Missing	4,320
Mean		1.62
Std. Deviation		.485
Variance		.235
Range		1
Minimum		1
Maximum		2

Table 6

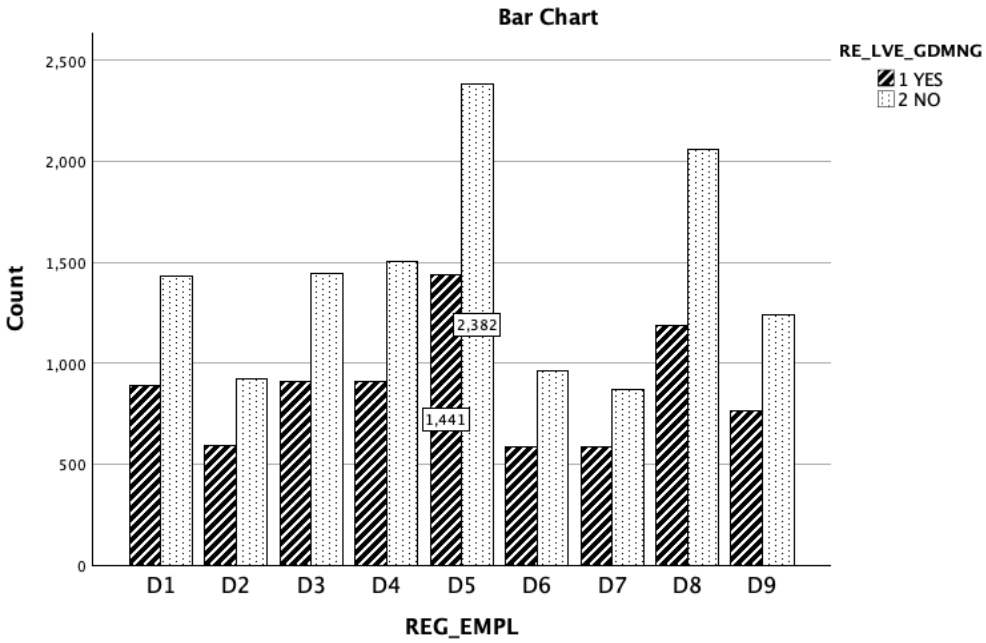
Descriptive Statistics of Reasons to Leave-Lack of Good Management and Leadership D5

RE_LVE_GDMNG			
Category		Frequency	Percentage
Valid	Yes	1,441	17.69
	No	2,382	29.25
	Total	3,823	46.94
Missing	System	4,320	53.05
Total		8,143	100.0

In Figure 3 shows the number of registered nurses in the South Atlantic Division (D5) who responded to reasons to leave because of a lack of good management and leadership. Nurses who selected “yes” were 1,441 responses or 17.69%, while those who selected “no” were 2,382 responses or 29.25%.

Figure 3

Bar Graph Illustrating Reasons to Leave-Good Management and Leadership D5



Research Question 1

The first research question addressed whether there was an association between nurses' intent to leave based on leadership and nurses' satisfaction in the South Atlantic Division of the United States in 2018. Tables 7–9 present the results of the logistic linear regression analysis to measure the correlation between nurse satisfaction and lack of good management and leadership. The analysis was selected to show only responses from the South Atlantic Division.

In Table 7, the correlation coefficient for nurse satisfaction, *R*, was .290, which measured the strength of the linear relationship between the two variables; the closer to 1, the stronger the relationship. This relationship was shown to be statistically significant. *R* square was .084, which indicated that this model was about 8% of the variance in the

dependent variable (nurses' satisfaction). The sig *F* change was used to determine the significance of this model, $p < .05$, which meant one could reject the null hypothesis of the research question addressing whether there was an association between nurse satisfaction and nurses' intent to leave based on leadership in the South Atlantic Division in 2018. The alternative hypothesis was accepted, which stated that there is a relationship between nurse satisfaction and nurses' intent to leave based on leadership in the South Atlantic Division in 2018.

Table 8 indicates the variance in the study. The regression statistics provided the variance and how the model explained the variation in the data. The residual indicated the predicted models compared the actual observations from the data. Results indicated that having a high residual value of 1482.864 meant that the predicted value was too low.

In Table 9, the independent variable coefficient (reasons to leave-lack of leadership) was -.389 with $p < .05$. With a confidence interval of -.430 to -.349, the confidence intervals determined the probability of the study. The constant variable coefficient (nurse satisfaction) was 2.5, $p < .05$, with a confidence interval of 2.442 to 2.580. Based on these results, for every increase in nurse satisfaction there was a decrease in leadership.

Table 7

Model Summary of Nurse Satisfaction and Lack of Good Management and Leadership D5

R Reg_Empl=D5 (Selected)	Sums of squares	Adjusted *R* square	Std error of the estimate	*R* change square	*F* change	Sig *F* change
.290	.084	.084	.623	.084	350.602	<.001

a. Predictors: (Constant), RE_LVE_GDMNG

Table 8

ANOVA Analysis of Nurse Satisfaction and Lack of Good Management and Leadership D5

Model	Category	Sum of squares	*df*	Mean square	*F*	Sig
1	Regression	136.062	1	136.062	350.602	<.001
	Residual	1482.864	3821	.388		
	Total	1618.926	3822			

a. Dependent Variable: PN_SATISFD
b. Selecting only cases for which REG_EMPL = D5
c. Predictors: (Constant), RE-LVE_GDMNG

Table 9

Coefficients of Nurse Satisfaction and Lack of Good Management and Leadership D5

Model	Category	Unstandardized coefficients B	Unstandardized coefficients Std. error	Standardized coefficients Beta	*t*	Sig	95% confidence interval for B Lower bound	95% confidence interval for B Upper bound
1	Constant	2.511	.035		71.295	<.001	2.442	2.580
	RE_LVE_GDMNG	-.389	.021	-.290	-18.724	<.001	-.430	-.349

a. Dependent Variable: PN_SATISFD
b. Selecting only cases for which REG_EMPL = D5

Tables 10 and 11 provided the descriptive statistics of the dependent variable, reasons to leave based on burnout. In Question D3 of the questionnaire, the respondents

were asked which reason would contribute to them leaving their primary nursing position. The dependent variable was coded as RE_LVE_BRNOUT with two responses: 1 = yes, and 2 = no. The respondents were asked their reasons for leaving because of burnout. The dependent variable's responses were over 3,800, a little over 46%. However, there were over 4,300 missing responses (53%). The missing values were not factored into the data analysis. Most participants selected no at 27%, while those who stated yes were 19%. The results were analyzed as follows.

Table 10

Descriptive Statistics of Reasons to Leave-Burnout D5

RE_LVE_BRNOUT		
N	Valid	3,823
	Missing	4,320
Mean		1.58
Std. deviation		.493
Variance		.243
Range		1
Minimum		1
Maximum		2

Table 11

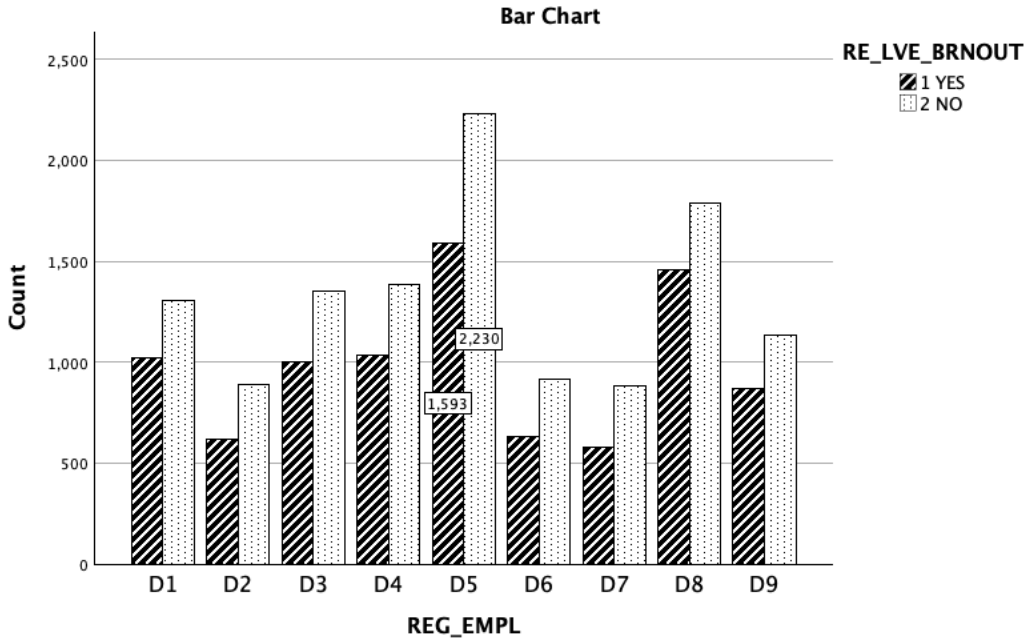
Descriptive Statistics of Reasons to Leave-Burnout D5

RE_LVE_BRNOUT			
Category		Frequency	Percentage
Valid	Yes	1,593	19.56
	No	2,230	27.38
	Total	3,823	46.94
Missing	System	4,320	53.05
Total		8,143	100.0

Figure 4 shows the number of registered nurses in the South Atlantic Division (D5) that responded to reasons to leave because of burnout. Nurses who selected “yes” were 1,593 responses or 19.56%, while those who selected “no” were 2,230 responses or 27.38%.

Figure 4

Bar Graph Illustrating Reasons to Leave-Burnout D5



Research Question 2

The second research question addressed whether there was an association between nurses' intent to leave based on leadership and nurses' intent to leave based on burnout in the South Atlantic Division of the United States in 2018. Tables 12-14 present the results of the logistic linear regression analysis to measure the correlation between reasons to leave based on burnout and lack of good management and leadership. The analysis was selected to show only responses from the South Atlantic Division.

In Table 12, the correlation coefficient for nurse burnout, *R*, is .141, which measured the strength of the linear relationship between the two variables; the closer it is to 1, the stronger the relationship. This relationship was shown to be statistically significant. *R* square is .020, which indicated that this model was about 2% of the

variance in the dependent variable (nurses' burnout). The sig *F* change is used to determine the significance of this model, $p < .05$, which meant one could reject the null hypothesis of this research question addressing whether there was an association between nurses' intent to leave based on nurse burnout and nurses' intent to leave based on leadership in the South Atlantic Division in 2018. The alternative hypothesis was accepted, that there is a relationship between nurses' intent to leave based on nurse burnout and nurses' intent to leave based on leadership in the South Atlantic Division.

Table 13 indicates the variance in the study. The regression statistics provided the variance and how the model explained the variance in the data. The residual indicated the predicted models compared the actual observations from the data. Results indicated that having a positive residual value of 910.809 meant the predicted value was too low.

In Table 14, the dependent variable coefficient (reasons to leave-lack of good management or leadership) was .143, $p < .05$. With a confidence interval of .111 to .175. While the constant variable coefficient (burnout) was 1.351, $p < .05$ and with a confidence interval of 1.297 to 1.405. Based on these results, for every increase in burnout there was an increase in leadership.

Table 12

Model Summary of Nurse Burnout and Lack of Good Management and Leadership D5

R Reg_Empl=D5 (Selected)	*R* square	Adjusted *R* square	Std error of the estimate	*R* change square	*F* change	Sig *F* change
.141	.020	.020	.488	.020	77.216	<.001

a. Predictors: (Constant), RE_LVE_GDMNG

Table 13

ANOVA Analysis of Nurse Burnout and Lack of Good Management and Leadership D5

Model	Category	Sum of squares	*df*	Mean square	*F*	Sig
1	Regression	18.406	1	18.406	77.216	<.001
	Residual	910.809	3,821	.238		
	Total	929.215	3,822			

a. Dependent Variable: RE_LVE_BRNOUT
b. Selecting only cases for which REG_EMPL = D5
c. Predictors: (Constant), RE-LVE_GDMNG

Table 14

Coefficients of Nurse Burnout and Lack of Good Management and Leadership D5

		Unstandardized coefficients		Standardized coefficients			95% confidence interval for B	
Model	Category	B	Std. error	Beta	*t*	Sig	Lower bound	Upper bound
1	Constant	1.351	.028		48.947	<.001	1.297	1.405
	RE_LVE_GDMNG	.143	.016	.141	8.787	<.001	.111	.175

a. Dependent Variable: RE_LVE_BRNOUT
b. Selecting only cases for which REG_EMPL = D5

Tables 15 and 16 detailed the descriptive statistics of the dependent variable, reasons to leave based on a stressful work environment. In Question D3 of the questionnaire, the respondents were asked which reason would contribute to them leaving their primary nursing position. The dependent variable was coded as RE_LVE_STRSSWE with two responses namely, 1 = yes, and 2 = no. The respondents were asked their reasons for leaving because of a stressful work environment. The dependent variable's responses were over 3,800, a little over 46%. However, there were over 4,300 missing responses (53%). The missing values were not factored into the data analysis. Most of the respondents said "no" at 29.51%, while those who stated "yes" were 17.43%.

Table 15

Descriptive Statistics of Reasons to Leave-Stressful Work Environment D5

RE_LVE_STRSSWE		
N	Valid	3,823
	Missing	4,320
Mean		1.63
Std. deviation		.483
Variance		.234
Range		1
Minimum		1
Maximum		2

Table 16

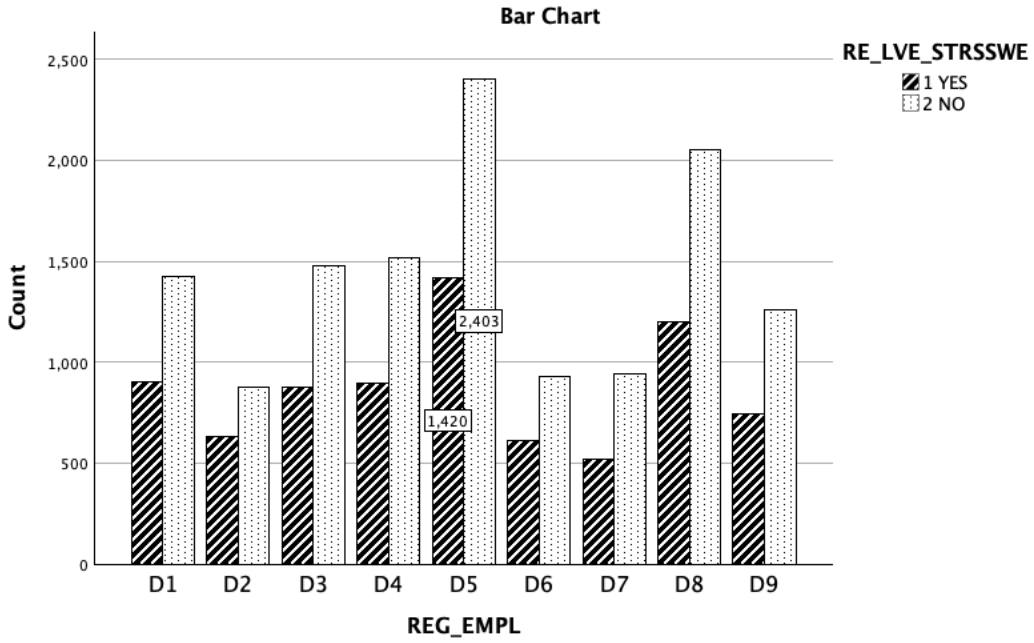
Descriptive Statistics of Reasons to Leave-Stressful Work Environment D5

RE_LVE_STRSSWE			
Category	Category	Frequency	Percentage
Valid	Yes	1,420	17.43
	No	2,403	29.51
	Total	3,823	46.94
Missing	System	4,320	53.05
Total		8,143	100.0

Figure 5 shows the number of registered nurses in the South Atlantic Division (D5) that responded to reasons to leave because of a stressful work environment. Nurses who selected “yes” were 1,420 responses or 17.43%, while those who selected “no” were 2,403 responses or 29.51%.

Figure 5

Bar Graph Illustrating Reasons to Leave-Stressful Work Environment D5



Research Question 3

The third research question addressed whether there was an association between nurses' intent to leave based on leadership and nurses' intent to leave based on a stressful work environment in the South Atlantic Division of the United States in 2018. Tables 17-19 present the results of the logistic linear regression analysis to measure the correlation between reasons to leave based on stressful work environment and lack of good management and leadership. The analysis was selected to show only responses from the division of the South Atlantic Division.

In Table 17, the correlation coefficient for a stressful work environment, *R*, is .224, which measured the strength of the linear relationship between the two variables;

the closer it is to 1, the stronger the relationship. This relationship was shown to be statistically significant. *R* square was .050, which indicated that this model was about 5% of the variance in the dependent variable (stressful work environment). The sig *F* change was used to determine the significance of this model, $p < .05$, which meant one could reject the null hypothesis of this research question addressing whether there was an association between nurses' intent to leave based on a stressful work environment and nurses' intent to leave based on leadership in the South Atlantic Division in 2018. The alternative hypothesis was accepted, which stated that there is a relationship between nurses' intent to leave based on a stressful work environment and nurses' intent to leave based on leadership in the South Atlantic Division in 2018.

Table 18 indicates the variance in the study. The regression statistics provided the variance and how the model explained the variance in the data. The residual indicated the predicted model compared the actual observations from the data. Results indicated that having a positive residual value of 847.670 meant the predicted value is too low.

In Table 19, the dependent variable coefficient (reasons to leave-lack of good management or leadership) was .225, a $p < .05$. With a confidence interval of .193 to .254, the confidence intervals determined the probability of the study. The constant variable coefficient (stressful work environment) was 1.266, $p < .05$, with a confidence interval of 1.213 to 1.318. Based on these results, for every increase in a stressful work environment there was an increase in leadership.

Table 17

Model Summary of Stressful Work Environment and Lack of Good Management and Leadership D5

R Reg_Empl=D5 (Selected)	*R* square	Adjusted *R* square	Std error of the estimate	*R* change square	*F* change	Sig *F* change
.224	.050	.050	.471	.050	202.351	<.001

a. Predictors: (Constant), RE_LVE_GDMNG

Table 18

ANOVA Analysis of Stressful Work Environment and Lack of Good Management and Leadership D5

Model	Category	Sum of squares	*df*	Mean square	*F*	Sig
1	Regression	44.891	1	44.891	202.351	<.001
	Residual	847.670	3,821	.222		
	Total	892.561	3,822			

a. Dependent Variable: RE_LVE_STRSSWE
b. Selecting only cases for which REG_EMPL = D5
c. Predictors: (Constant), RE-LVE_GDMNG

Table 19

Coefficients of Stressful Work Environment and Lack of Good Management and Leadership D5

		Unstandardized coefficients		Standardized coefficients			95% confidence interval for B	
Model	Category	B	Std. error	Beta	*t*	Sig	Lower bound	Upper bound
1	Constant	1.266	.027		47.534	<.001	1.213	1.318
	RE_LVE_GDMNG	.224	.016	.224	14.225	<.001	.193	.254

a. Dependent Variable: RE_LVE_STRSSWE
b. Selecting only cases for which REG_EMPL = D5

Lastly, a multivariate analysis was conducted to analyze the relationship between the independent variable (lack of good management or leadership) and all the dependent variables (nurse satisfaction, nurse burnout and the work environment). For this analysis a research question was not presented but to understand how all variables interact with one another.

Tables 20-22 present the multivariate regression analysis to measure the association of all three dependent variables (nurses' satisfaction, nurse burnout, and stressful work environment) and the independent variable (lack of good management and leadership). The analysis was selected to show only responses from the division of the South Atlantic Division.

In Table 20, the correlation coefficient of all three dependent variables, *R*, is .329, which measured the strength of the relationship between all variables; the closer it is to 1, the stronger the relationship. This relationship was shown to be statistically significant. *R* square was .108, which indicated that this model was about 10% of the variance in the dependent variables. The sig *F* change was used to determine the significance of this model, $p < .05$, which meant one could reject the null hypothesis of the research question. For this analysis a research question was not presented but to detail how all variables interact with one another.

Table 21 indicates the variance in the study. The regression statistics provided the variance and how the model explained the variance in the data. The residual indicated the predicted model compared the actual observation from the data. Results indicated that having a positive residual value of 800.680 meant the predicted value is too low.

In Table 22, the constant variable coefficient, (reasons to leave-lack of leadership) was 1.673, $p < .05$. With a confidence interval of 1.586 to 1.759, the confidence intervals determined the probability of the study. The variable coefficient of nurse satisfaction was -.181, $p < .05$, with a confidence interval of -.205 to -.158. The variable coefficient of nurse burnout is .031 with a $p>.05$ with a confidence interval of -.001 to .063. The variable coefficient of stressful work environment is .149, $p < .05$, with a confidence interval of .116 to .182. All relationships proven to have a statistical significance with one another except nurse burnout when factoring for the South Atlantic Division.

Table 20

Model Summary of all Independent Variables and Lack of Good Management and Leadership D5

R Reg_Empl=D5 (Selected)	*R* square	Adjusted *R* square	Std error of the estimate	*R* change square	*F* change	Sig *F* change
.329	.108	.108	.458	.108	154.483	<.001

a. Predictors: (Constant), RE_LVE_GDMNG

Table 21

Multiple Regression Analysis of All Independent Variables and Lack of Good Management and Leadership D5

Model	Category	Sum of squares	*df*	Mean square	*F*	Sig
1	Regression	97.166	3	32.389	154.483	<.001
	Residual	800.680	3,819	.210		
	Total	897.845	3,822			

a. Dependent Variable: RE_LVE_GDMNG
b. Selecting only cases for which REG_EMPL = D5
c. Predictors: (Constant), RE_LVE_STRSSWE, RE_LVE_BRNOUT, PN_SATISFD

Table 22

Coefficients of all Dependent Variables and Lack of Good Management and Leadership D5

Model	Category	Unstandardized coefficients		Standardized coefficients			95% confidence interval for B	
		B	Std. error	Beta	*t*	Sig	Lower bound	Upper bound
1	Constant	1.673	.044		38.006	<.001	1.586	1.759
	PN_SATISFD	-.181	.012	-.243	-15.184	<.001	-.205	-.158
	RE_LVE_BRNOUT	.031	.016	.031	1.878	.060	-.001	.063
	RE_LVE_STRESSWE	.149	.017	.148	8.872	<.001	.116	.182

a. Dependent Variable: RE_LVE_GDMNG
b. Selecting only cases for which REG_EMPL = D5

Summary

In this section, I presented the analysis of the National Sample Survey of Registered Nurses 2018 filtered for the South Atlantic Division. For the purposes of this analysis, nurse practitioners and registered nurses were included. The analysis analyzed the registered nurses and nurse practitioners in the South Atlantic Division, which equated to 8,143. Additionally, multiple logistic regression, linear logistic regression, and crosstabulation were used to analyze the correlation between the dependent variables (nurses' satisfaction, nurse burnout, and stressful work environment) and the independent variable (lack of good management and leadership). Ultimately, it was determined that there was a correlation between lack of good management/leadership and nurse retention. For research question one, the findings indicated that there was a negative statistically significant association between lack of good management and leadership and nurses' satisfaction. For research question two, the findings indicated that there was a positive statistically significant association between lack of good management and leadership and

nurses' intent to leave based on nurse burnout. For research question three, the findings indicated that there was a positive statistically significant association between a lack of good management and leadership and nurses' intent to leave based on a stressful work environment.

In every instance of linear logistic regression analysis, the $p < .05$, means that it is statistically significant, and the null hypotheses could be rejected. However, when the multiple logistic regression analysis was conducted, the correlation between nurse burnout and lack of good management/leadership, the $p > .05$, with a confidence interval between -.001 and .063. Results indicated there was weak evidence against the null hypothesis and whether a statistical difference exist cannot be concluded. Section 4 detailed the interpretation of the findings, limitations of the study, recommendations for future research, implications for professional practice and social change, and a conclusion.

Section 4: Application to Professional Practice and Implications for Social Change

The purpose of the study was to conduct a secondary analysis of registered nurses and nurse practitioners on their leadership effectiveness in retention and nurses' intent to leave their profession. This study was conducted to examine the characteristics and tendencies of registered nurses in their respective nursing positions in state and national health care environments. The quantitative cross-sectional design was used to assess various dynamics affecting the operations of registered nurses and their leaders' effectiveness. I analyzed the correlation between lack of good management/leadership (independent variable) and nurses' satisfaction, nurse burnout, and work environment (dependent variables) to determine how nurse retention was affected. There were statistically significant positive relationships found between the dependent variables (nurses' satisfaction, nurse burnout, and work environment) and the independent variable (lack of good management/ leadership). However, when analyzed collectively, nurses' intent to leave based on nurse burnout and lack of good management/leadership were not significant, and there was no concrete evidence that nurse burnout was a predictor of lack of good management/leadership.

Interpretation of the Findings

Linear logistic regression analysis was used to test each dependent variable individually to determine the significance. Multiple logistic regression analysis was used to test all three dependent variables together. The results of these analyses displayed statistical significance for all three research questions in addition to the multiple logistic

regression analysis, indicating that there was a positive correlation between nurse retention and lack of good management/leadership.

RQ1 Analysis

The RQ1 analysis addressed the correlation between nurses' intent to leave based on management/leadership and nurses' satisfaction. The analysis indicated a negative correlation between nurse satisfaction and nurses' intent to leave based on lack of good management/leadership, with a coefficient *R* of .290. That meant for every unit of increase in nurse satisfaction, there was a decrease in nurses' intent to leave based on lack of good management/leadership. This correlation was statically significant due to $p < .05$ with a confidence interval of 2.442 to 2.580, which meant that the null hypothesis of there being no relationship between nurses' satisfaction and nurses' intent to leave based on lack of good management/leadership could be rejected. Simone et al. (2018) found how poor leadership can significantly impact nurse culture and outcomes by decreasing job satisfaction. Kelly et al. (2019) noted that ensuring nurse satisfaction creates an environment warranted for nurses. Current results affirm how leadership and management can affect a nurse's ability to enjoy their job, which can affect retention in the workplace. By affecting retention in the workplace, organizations can impact the stability and quality of patient care.

RQ2 Analysis

The RQ2 analysis addressed the correlation between management/leadership and nurse burnout. The analysis showed a positive correlation between nurses' intent to leave based on lack of good management/leadership and nurses' intent to leave based on nurse

burnout, with a coefficient *R* of .141. That meant that for every increase in reasons to leave based on burnout there was an increase in lack of good management/leadership. This correlation was statistically significant due to $p < .05$ with a confidence interval from 1.297 to 1.405, which meant that the null hypothesis of there being no relationship between nurses' intent to leave based on nurses' burnout and lack of good management/leadership could be rejected. Chen and Chen (2018) noted that burnout among the workforce can lead to adverse work-related effects such as low organizational commitment, job dissatisfaction, and high employee turnover but can be mitigated through effective and positive leadership. Current results affirm how leadership and management can affect nurse burnout, which affects nurse retention.

RQ3 Analysis

The RQ3 analysis addressed the correlation between nurses' intent to leave based on management/leadership and nurses' intent to leave based on a stressful work environment. The analysis showed a positive correlation between a lack of good management/leadership and a nurses' intent to leave based on stressful work environment, with a coefficient *R* of .224. That meant that for every increase in reasons to leave based on a stressful work environment, there was an increase in lack of good management/leadership. This correlation was statistically significant due to $p < .05$ with a confidence interval from 1.213 to 1.318, which meant that the null hypothesis of there being no relationship between nurses' intent to leave based on a stressful work environment and lack of good management/leadership could be rejected. The absence of good leadership and stress among nurses can increase, which can negatively affect patient

safety outcomes in the form of unwanted patient incidents and medication errors (Cummings et al., 2021). Current results affirm how leadership and management can affect a stressful work environment throughout the course of a nursing profession.

Multiple Logistic Regression Analysis

A multiple logistic regression analysis was conducted to determine how the relationships between the variables differed from the linear regression model. There was no research question or hypotheses associated with this analysis. The multiple regression analysis addressed the South Atlantic Division, which included nurse practitioners and registered nurses. The total population analyzed was consistent with the entire study, 8,143. The multiple logistic regression analysis indicated a statistically significant negative correlation with the dependent variable (nurse satisfaction), according to the coefficient R of -.181, $p < .05$, and a confidence interval of 1.586 to 1.759. This indicated that as nurses' satisfaction decreased, a lack of good management or leadership increased.

There was a positive correlation, but it was not statistically significant with the dependent variable (nurse burnout) according to the coefficient R of .031, $p < .060$, and a confidence interval of -.001 to .063. I could not reject the null hypothesis of there being no relationship between nurses' intent to leave based on nurse burnout and lack of good management/leadership. Also, because the confidence interval included 0, I could not conclude that this variable was a predictor. This analysis showed that there was no concrete evidence that nurse burnout was a predictor of a lack of good management/leadership when examined with the other dependent variables. Further research is needed to determine whether nurse burnout is a predictor of leadership. There

was a statistically significant positive correlation with the dependent variable (stressful work environment) according to the coefficient of .149 with a $p < .05$ and a confidence interval of .116 to .182. This indicated that as reasons to leave based on stressful work environment increased, so did a lack of good management/leadership.

Theoretical Framework

Herzberg's (1968) two-factor theory on work motivation explains how extrinsic (hygiene) and intrinsic (motivation) factors can influence satisfaction and personal achievement in the workplace. Yusoff et al. (2013) noted that motivation factors are intrinsic factors that increase job satisfaction, while hygiene factors are extrinsic factors that inhibit workforce discontent. In the analysis of the NSSRN 2018, there was a statistically significant relationship between nurses' satisfaction, nurse burnout, stressful work environment, and a lack of good management/leadership. The results supported the hypotheses that there was a statistically significant relationship between nurses' satisfaction and lack of good leadership/management, there was a statistically significant relationship between nurses' burnout and lack of good leadership/management, and there was a statistically significant relationship between stressful work environment and lack of good leadership/management. Therefore, there was a correlation between lack of good management/leadership and nurse retention.

Limitations of the Study

The study's primary limitation was that the data analyzed were obtained 6 years ago, which meant several parameters may have changed. Due to the nature of the study, limiting it to the South Atlantic Division reduced the significance of the study given that

there were only 8,143 registered nurses and nurse practitioners who were being evaluated. In Section C of the survey, the question asked nurses for the reasons why they would leave their nurse profession and respondents could have chosen more than one response. I did not analyze for multiple responses but selected only single responses; the responses were limited to the South Atlantic Division consisting of 8,143 responses from registered nurses and nurse practitioners. Inadequacies associated with original data collection process, such as potential recruitment biases, cooperation issues of the respondents, and limitations of the informed consent could affect the validity of current findings. The nature of research prohibits real-time adjustments and issues emanating from emerging research questions, which affects the validity of the findings. For instance, recruiting enough nurses to participate in the study may have proved challenging because access to participants could have been a significant limitation. Also, missing data collected in the study could have limited the findings. Analyzing the influence leadership has on nurse retention or nurse turnover were studied only in the South Atlantic Division. The results from this study are not generalizable to other divisions, which would need to be analyzed to determine nurses' perceptions of leadership.

Recommendations

The secondary data could lead to additional research to assist in filling the gaps in nurses' perceptions of their leadership's effectiveness. Additional research should be conducted based on emerging research questions to examine why there was a differentiating result when nurse burnout was included with other dependent variables. Assessments of the missing entries could be explored to understand why respondents

avoided such questions. One way to understand the effectiveness of how leadership and management can affect the nursing workforce is by clarifying the questions to include what type of leadership or management styles nursing employees face. Another recommendation is to find a way to encourage more nurses to take the survey because access to more technology has proven to be helpful in data collection. Analyzing the entire data set instead of a particular division could assist with a holistic assessment of the nurse workforce.

Implications for Professional Practice and Social Change

The study highlighted whether reasons to leave are attributed to a lack of management/leadership, satisfaction in the workplace, burnout, and a stressful work environment to determine nurse retention. There was a statistically significant correlation between lack of good leadership/management and nurse retention. This could be used to improve professional practice and create positive social change.

Professional Practice

Health care organizations try to understand how to provide the maximum number of services while maintaining patient quality of care and work–life balance for nurses and other health care professionals. The lack of nurse retention has serious public health and safety implications that can cause significant strain on the health industry. The current study findings may help health care leaders grasp the role of leadership on nurse retention and make evidence-based decisions to increase employee satisfaction and well-being.

The findings from the literature supported the increase in nurse turnover with a lack of leadership support (Majeed & Jamshed, 2020). Leaders must find innovative ways

to increase nurses' satisfaction because it is directly linked to nurse retention. Additionally, the more leaders are involved in a supportive, direct, and influential way, the less likely nurses will feel burnout in the organization. Health care leaders, nursing leaders, and administrators need to analyze how to create policies and procedures to mitigate poor management/leadership in health care facilities, which can assist in changing the organizational culture. Instead of hiring more nurses, which may help initially, leadership could become more accountable in assisting with nurse retention (Smama'h et al., 2023).

Leaders in health care organizations must take more responsibility in health facilities when it comes to nurse turnover. The policies and culture established can make a difference in any organization, especially one that is predicated on nurses. Using the current study as a guide, health care leaders and organizations could implement these changes in the initial step toward incremental change for all.

The NSSRN is a national survey that is completed every 3–4 years. The NSSRN can be analyzed to determine how the nursing landscape has changed over the last decade and whether nurse satisfaction and retention improvements have improved among organizations. Health care leaders can use the current study as a baseline to determine whether, over the years, nurse satisfaction stays the same or differs with implementation of new policies on leadership and culture. This assumes that a health care organization will hold leaders accountable for creating positive practices for nurses.

Social Change

Organizationally, nurse retention will be an issue throughout the health care workforce. The study of the effectiveness of leadership and its influence on nurse retention portrays crucial significance for the nursing profession and health care organizations. As health facilities adapt and evolve to the changing societal needs, effective leadership focuses on providing optimum quality of care and creating a supportive and conducive environment for nurses, which is essential to increase nurse retention.

The continuum of care for patients will continue to worsen if nurse turnover does not decrease among health care organizations. The culture change within health organizations is pertinent for the continuation of healthy people. The findings from the literature indicated that the more nurse turnover increases, the more there is an increase in lack of patient care, an increase in negative patient outcomes, and disparities among populations, which become the norm (Majeed & Jamshed, 2020; Quesado et al., 2022).

Reducing nurse turnover is essential for the survival of health care facilities and organizations. Nurses are the pillar of the health industry, and more must be done to offset the new normal being created. A lack of health care leaders owning the responsibility of creating a positive culture for nurses to feel satisfied is damaging patients worldwide and nurses who remain at health care organizations. Patients experience longer wait times, inaccurate treatment, and numerous errors from nurses due to high stress and lack of satisfaction (Pappa et al., 2023). This also does not take away from the nurses' well-being, which suffers and contributes to the lack of production. To

reverse this process, establishing a culture and environment for nurses to practice effectively and efficiently is critical for the success of any health organization. It starts with health leaders ensuring that they are promoting a culture that is enabling and accountable for the safety of the patients and the continuation of health organizations.

Conclusion

The current study addressed the gap in nurse perception of their leadership effectiveness. The 2018 NSSRN data were analyzed to determine how the lack of good management/leadership, an independent variable, affects nurse retention through the dependent variables of nurses' satisfaction, reasons to leave based on burnout, and reasons to leave based on a stressful work environment. The results showed a statistically significant association between a lack of good management/leadership and nurse satisfaction, a lack of good management/leadership and nurse burnout, and a lack of good management/leadership and a stressful work environment. However, in the multivariate logistic analysis, nurse burnout, when coupled with the other dependent variables, did not have a statistically significant association with the independent variable, which was a lack of good management/leadership.

Based on the study results, nurse retention and lack of good management/leadership showed a positive correlation. Additionally, nurses' perception of their leader's effectiveness is significant and can have a tremendous influence on nurse retention. Health care leaders can use this study's findings to better understand the struggles that the nurse workforce may be experiencing throughout their organization.

With increased knowledge of why nurses leave an organization, administrators may reduce turnover and organizational costs and improve patient care.

References

AL-Dossary, R. N. (2022). Leadership style, work engagement and organizational commitment among nurses in Saudi Arabian hospitals. *Journal of Healthcare Leadership*, *14*, 71–81. https://doi.org/10.2147/jhl.s365526

Almost, J., & Mildon, B. (2022). R-E-S-P-E-C-T: A key to nurse retention. *Nursing Leadership (1910-622X)*, *35*(2), 12–28. https://doi.org/10.12927/cjnl.2022.26876

Alzahrani, S., & Hasan, A. A. (2019). Transformational leadership style on nursing job satisfaction amongst nurses in hospital settings: Findings from systematic review. *Global Journal of Health Science*, *11*(6), 25. https://doi.org/10.5539/gjhs.v11n6p25

Anwer, S. A., Mohammad, A. J., Abdulrahman, B. S., Qader, K. S., Jamil, D. A., Gardi, B., & Sabah, K. K. (2022). Leading project teams: The role of leadership styles in the dynamic work environment. *International Journal of English Literature and Social Sciences*, *7*(6), 022–028. https://doi.org/10.22161/ijels.76.4

Bimpong, K. A., Khan, A., Slight, R., Tolley, C. L., & Slight, S. P. (2020). Relationship between labour force satisfaction, wages and retention within the UK National Health Service: A systematic review of the literature. *BMJ Open*, *10*(7), Article e034919. https://doi.org/10.1136/bmjopen-2019-034919

Bogue, R. J., & Carter, K. F. (2019). A model for advancing nurse well-being. *Nurse Leader*, *17*(6), 526–530. https://doi.org/10.1016/j.mnl.2019.09.011

Bogue, R. J., & Carter, K. F. (2022). The nurse wellbeing self-assessment supports the model of leadership influence for health professional wellbeing. *Nursing Outlook*,

70(3), 478–486. https://doi.org/10.1016/j.outlook.2022.02.001

Buerhaus, P. I. (2021). Current nursing shortages could have long-lasting consequences: Time to change our present course. *Nursing Economics*, *39*(5), 247–250. https://www.proquest.com/scholarly-journals/current-nursing-shortages-could-have-long-lasting/docview/2581886413/se-2

Carter, K. F., & Bogue, R. J. (2022). Application of the model of leadership influence for health professional wellbeing during COVID-19. *Nursing Outlook*, *70*(3), 458–464. https://doi.org/10.1016/j.outlook.2022.02.010

Chen, S., & Chen, C. (2018). Antecedents and consequences of nurses' burnout. *Management Decision*, *56*(4), 777–792. https://doi.org/10.1108/md-10-2016-0694

Cummings, G. G., Lee, S., Tate, K., Penconek, T., Micaroni, S. P. M., Paananen, T., & Chatterjee, G. E. (2021). The essentials of nursing leadership: A systematic review of factors and educational interventions influencing nursing leadership. *International Journal of Nursing Studies*, *115*, 103842. https://doi.org/10.1016/j.ijnurstu.2020.103842

De Vries, N., Lavreysen, O., Boone, A., Bouman, J., Szemik, S., Baranski, K., Godderis, L., & De Winter, P. (2023). Retaining healthcare workers: A systematic review of strategies for sustaining power in the workplace. *Healthcare (Basel, Switzerland)*, *11*(13), 1887. https://doi.org/10.3390/healthcare11131887

Dewanto, A., & Wardhani, V. (2018). Nurse turnover and perceived causes and consequences: A preliminary study at private hospitals in Indonesia. *BMC Nursing*, *17*(2), 52. https://doi.org/10.1186/s12912-018-0317-8

El-Gazar, H. E., Zoromba, M. A., Zakaria, A. M., Abualruz, H., & Abousoliman, A. D. (2022). Effect of humble leadership on proactive work behaviour: The mediating role of psychological empowerment among nurses. *Journal of Nursing Management, 30*(7), 2689–2698. https://doi.org/10.1111/jonm.13692

Galura S. (2020). On the frontlines of nursing leadership: Managerial dissonance and the implications for nurse managers and health care organizations. *Nurse Leader*, *18*(5), 476–480. https://doi.org/10.1016/j.mnl.2020.05.012

Guo, Y., Fan, J., Lam, L., Plummer, V., Cross, W., Ma, Y., Wang, Y., & Jia, Y. (2022). Associations between perceived overqualification, transformational leadership and burnout in nurses from intensive care units: A multicentre survey. *Journal of Nursing Management, 30*(7), 3330–3339. https://doi.org/10.1111/jonm.13774

Herzberg, F. (1968). *One more time: How do you motivate employees?* Harvard Business Review Press. https://doi.org/10.1007/978-1-349-02701-9_2

Islam, T., Ali, M., Jamil, S., & Ali, H. F. (2021). How workplace bullying affects nurses' well-being? The roles of burnout and passive avoidant leadership. *International Journal of Human Rights in Healthcare*, *15*(5), 426–442. https://doi.org/10.1108/ijhrh-05-2021-0113

Jarden, R. J., Sandham, M., Siegert, R. J., & Koziol-McLain, J. (2020). Intensive care nurses' well-being: A systematic review. *Australian Critical Care*, *33*(1), 106-111. https://doi.org/10.1016/j.aucc.2018.11.068

Jenkins, D., Burton, C., & Holmes, D. (2022). (Re)defining nursing leadership: On the importance of parrhesia and subversion. *Journal of Nursing Management, 30*(7),

2147-2153. https://doi.org/10.1111/jonm.13520

Kelly, L.A., Gee, P.M., & Butler, R.J. (2021). Impact of nurse burnout on organizational and position turnover. *Nurse Outlook, 69(1),* 96102. https://doi.org/10.1016/j.outlook.2020.06.008

Kelly, L. A., Lefton, C., Fischer, S. A. (2019). Nurse leader burnout, satisfaction, and work-life balance. *JONA: The Journal of Nursing Administration 49(9),* 404-410. https://doi.org/10.1097/nna.0000000000000784

Khairunnisa, P., & Nadjib, M. (2019). Effect of leadership style on service quality and job satisfaction among hospital nurses: A systematic review. *Strengthening Hospital Competitiveness to Improve Patient Satisfaction and Better Health Outcomes.* https://doi.org/10.26911/the6thicph.04.57

Lei, L., Lin, K., Huang, S., Tung, H., Tsai, J., & Tsay, S. (2022). The impact of organizational commitment and leadership style on job satisfaction of nurse practitioners in acute care practices. *Journal of Nursing Management*, *30*(3), 651-659. https://doi.org/10.1111/jonm.13562

Magbity, J., Ofei, A., & Wilson, D. (2020). Leadership styles of nurse managers and turnover intention. *Hospital Topics*, *98*(2), 45-50. https://doi.org/10.1080/00185868.2020.1750324

Magombo-Bwanali, N. (2019). Relationship between leader behaviors and subordinates' work performance. *International Journal of Research in Business and Social Science (2147- 4478)*, *8*(1), 50-63. https://doi.org/10.20525/ijrbs.v8i1.180

Majeed, N., & Jamshed, S. (2020). Nursing turnover intentions: The role of leader

emotional intelligence and team culture. *Journal of Nursing Management, 29*(2), 229-239. https://doi.org/10.1111/jonm.13144

Marufu, T. C., Collins, A., Vargas, L., Gillespie, L., & Almghairbi, D. (2021). Factors influencing retention among hospital nurses: Systematic review. *British Journal of Nursing, 30*(5), 302–308. https://doi.org/10.12968/bjon.2021.30.5.302

McCay, R., Lyles, A. A., & Larkey, L. (2018). Nurse leadership style, nurse satisfaction, and patient satisfaction. *Journal of Nursing Care Quality, 33*(4), 361-367. https://doi.org/10.1097/ncq.0000000000000317

Naseer, A., Perveen, K., Afzal, M., Waqas, A., & Gillani, S. A. (2018). The impact of leadership styles on staff nurses' turnover intentions. *International Journal of Academic Research in Business and Social Sciences, 7*(12). https://doi.org/10.6007/ijarbss/v7-i12/3702

Ofei, A. M. A., Paarima, Y., Barnes, T., & Poku, C. A. (2022). Toxic leadership behaviour of nurse managers on perceived job satisfaction and productivity of nursing workforce in sub-saharan Ghana: A multi-centre cross-sectional study. *Journal of Nursing Management, 30*(7), 2733-2742. https://doi.org/10.1111/jonm.13741

Ozkan, A., Camlica, T., & Kartal, H. (2022). An analysis of the effect of nurse managers' toxic leadership behaviours on nurses' perceptions of professional values: A cross-sectional survey. *Journal of Nursing Management, 30*(4), 973-980. https://doi.org/10.1111/jonm.13597

Pappa, D., Koutelekos, I., Evangelou, E., Dousis, E., Mangoulia, P., Gerogianni, G.,

Zartaloudi, A., Toulia, G., Kelesi, M., Margari, N., Ferentinou, E., Stavropoulou, A., & Dafogianni, C. (2023). Investigation of nurses' wellbeing towards errors in clinical practice-The role of resilience. *Medicina (Kaunas, Lithuania), 59(10),* 1850. https://doi.org/10.3390/medicina59101850

Pega, F., Náfrádi, B., Momen, N. C., Ujita, Y., Streicher, K. N., Prüss-Üstün, A. M., Descatha, A., Driscoll, T., Fischer, F. M., Godderis, L., Kiiver, H. M., Li, J., Magnusson Hanson, L. L., Rugulies, R., Sørensen, K., & Woodruff, T. J. (2021). Global, regional, and national burdens of ischemic heart disease and stroke attributable to exposure to long working hours for 194 countries, 2000–2016: A systematic analysis from the WHO/ILO Joint Estimates of the work-related burden of disease and injury. *Environment International, 154*, 106595. https://doi.org/10.1016/j.envint.2021.106595

Putra, A. P., Kusnanto, K., & Yuwono, S. R. (2020). Effects of job satisfaction and organizational commitment on nurse retention: A systematic review. *Indonesian nursing journal of education and clinic (Injec), 5*(2), 197. https://doi.org/10.24990/injec.v5i2.319

Quesado, A. J., Estanqueiro, M., Melo, M. B., & de Jesus Oliveira, I. (2022). Transformational leadership and nurses' satisfaction with their team: A cross-sectional study. *Nursing Practice Today*. https://doi.org/10.18502/npt.v9i3.10226

Rai, R., Varghese Thekkekara, J., & Kanhare, R. (2021). Herzberg's two-factor theory: A study on nurses' motivation. *RGUHS Journal of Allied Health Sciences, 1*(1). https://doi.org/10.26463/rjahs.1_1_5

Saleh, U., O'Connor, T., Al-Subhi, H., Alkattan, R., Al-Harbi, S., & Patton, D. (2018). The impact of nurse managers' leadership styles on ward staff. *British Journal of Nursing, 27*(4), 197-203. https://doi.org/10.12968/bjon.2018.27.4.197

Senek, M., Robertson, S., Ryan, T., King, R., Wood, E., Taylor, B., & Tod, A. (2020). Determinants of nurse job dissatisfaction—Findings from a cross-sectional survey analysis in the UK. *BMC Nursing, 19*(1), 88. https://doi.org/10.1186/s12912-020-00481-3

Shaffer, F. A., & Curtin, L. (2020). Nurse turnover: Understand it, reduce it. *My American Nurse, 15*(8), 57-59. https://www.myamericannurse.com/wp-content/uploads/2020/08/an8-Turnover-728.pdf

Simone, S. D., Planta, A., & Cicotto, G. (2018). The role of job satisfaction, work engagement, self-efficacy and agentic capacities on nurses' turnover intention and patient satisfaction. *Applied Nursing Research, 39,* 130–140. https://doi.org/10.1016/j.apnr.2017.11.004

Smama'h, Y., Eshah, N. F., Al-Oweidat, I. A., Rayan, A., & Nashwan, A. J. (2023). The impact of leadership styles of nurse managers on nurses' motivation and turnover intention among Jordanian nurses. *Journal of Healthcare Leadership, 15,* 19-29. https://doi.org/10.2147/jhl.s394601

Specchia, M. L., Cozzolino, M. R., Carini, E., Di Pilla, A., Galletti, C., Ricciardi, W., & Damiani, G. (2021). Leadership styles and nurses' job satisfaction. Results of a systematic review. *International Journal of Environmental Research and Public Health, 18(4),* 1552. https://doi.org/10.3390/ijerph18041552

Spence Laschinger, H. K., Wong, C. A., & Grau, A. L. (2012). The influence of authentic leadership on newly graduated nurses' experiences of workplace bullying, burnout and retention outcomes: A cross-sectional study. *International Journal of Nursing Studies, 49(10),* 1266-1276. https://doi.org/10.1016/j.ijnurstu.2012.05.012

Suliman, M., Almansi, S., Mrayyan, M., ALBashtawy, M., & Aljezawi, M. (2020). Effect of nurse managers' leadership styles on predicted nurse turnover. *Nursing Management, 27(5),* 23-28. https://doi.org/10.7748/nm.2020.e1928

Suwarno, B. (2023). Analysis of head nurses' leadership styles to staff inpatient nurses' job performance in hospital. *International Journal of Science, Technology & Management, 4(2),* 317-326. https://doi.org/10.46729/ijstm.v4i2.770

Tripathy, J. P. (2013). Secondary data analysis: Ethical issues and challenges. *Iranian Journal of Public Health, 42(12),*1478 - 1479. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4441947/

U.S. Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Workforce Analysis. 2019. Technical Report for the National Sample Survey of Registered Nurses, Rockville, Maryland. https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/data-research/nssrn-technical-report.pdf

Uslu Sahan, F., & Terzioglu, F. (2022). Transformational leadership practices of nurse managers: The effects on the organizational commitment and job satisfaction of staff nurses. *Leadership in Health Services, 35*(4), 494-505.

https://doi.org/10.1108/lhs-11-2021-0091

Wang, X., & Cheng, Z. (2020). Cross-sectional studies: strengths, weaknesses, and recommendations. *Chest, 158*(1), S65-S71. https://pubmed.ncbi.nlm.nih.gov/32658654/

Wang, H., Jin, Y., Wang, D., Zhao, S., Sang, X., & Yuan, B. (2020). Job satisfaction, burnout, and turnover intention among primary care providers in rural China: Results from structural equation modeling. *BMC Family Practice*, *21*(1). https://doi.org/10.1186/s12875-020-1083-8

Wei, H., King, A., Jiang, Y., Sewell, K. A., & Lake, D. M. (2020). The impact of nurse leadership styles on nurse burnout: *Nurse Leader*, *18*(5), 439-450. https://doi.org/10.1016/j.mnl.2020.04.002

Woodward, K. F., & Willgerodt, M. (2022). A systematic review of registered nurse turnover and retention in the United States. *Nursing Outlook*, *70*(4), 664–678. https://doi.org/10.1016/j.outlook.2022.04.005

Xuefeng, Q. (2023). The effect of leadership style on employee motivation: A case study of manufacturing companies. *Journal of Management and Administration Provision*, *3*(1), 12-16. https://doi.org/10.55885/jmap.v3i1.221

Yusoff, W. F. W., Kian, T. S., & Idris, M. T. M. (2013). Herzberg's two factors theory on work motivation: Does its work for today's environment? *Global Journal of Commerce and Management*, *2*(5), 18-22. https://www.researchgate.net/publication/262639924_Herzberg's_Two-Factor_Theory_on_Work_Motivation_Does_it_Works_for_Todays_Environment

Zhang, F., Peng, X., Huang, L., Liu, Y., Xu, J., He, J., . . . Chen, Y. (2022). A caring leadership model in nursing: A grounded theory approach. *Journal of Nursing Management*, *30*(4), 981-992. https://doi.org/10.1111/jonm.13600

Zhou, J., & Zhang, K. F. (2022). Effect of ethical nurse leaders on subordinates during pandemics. *Nursing Ethics*, *29*(2), 304-316. https://doi.org/10.1177/09697330211030673

Appendix: Health Resources and Services Administration for Data Set

On June 26, 2023, at 5:54 AM, NCHWA wrote:

Good Morning Dewight.

Thank you for contacting the National Center for Health Workforce Analysis (NCHWA). No written consent is needed, you are welcome to utilize 2018 NSSRN data. Please acknowledge the source of data.

Best regards,

The NCHWA Inquiry Team.