

2022

## Leadership Styles and RN Turnover Intentions in Long-Term Care Facilities

Kelli M. Casey  
*Walden University*

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Nursing Commons](#)

---

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact [ScholarWorks@waldenu.edu](mailto:ScholarWorks@waldenu.edu).

# Walden University

College of Management and Technology

This is to certify that the doctoral study by

Kelli Casey

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. Charlie Shao, Committee Chairperson, Doctor of Business Administration  
Faculty

Dr. Patsy Kasen, Committee Member, Doctor of Business Administration Faculty

Dr. Deborah Nattress, University Reviewer, Doctor of Business Administration  
Faculty

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

Walden University  
2022

Abstract

Leadership Styles and RN Turnover Intentions in Long-Term Care Facilities

by

Kelli Casey

MA, Webster University, 2014

BS, Illinois State University, 2007

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

November 2022

## Abstract

Employee turnover is a concern for leaders in the nursing home industry because employees with turnover intentions may negatively impact the continuity of operations and strategic plans, resulting in poor quality of care for residents. Grounded in House's path-goal theory, the purpose of this quantitative, correlational study was to examine the relationship among idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management by exception-active management by exception-passive, and turnover intentions in RNs. The independent variables were the subcategories of transformational and transactional leadership. The dependent variable was turnover intentions. Participants included 110 nonmanagement RNs working in long-term care facilities in Illinois. Data was collected using the Multifactor-Leadership Questionnaire (MLQ-5x short) and the Turnover Intentions Scale (TIS-6). The multiple linear regression analysis results indicated the model was able to significantly predict turnover intentions:  $F(8,101) = 8.53, p < .001, R^2 = .40, R^2_{adj} = .36$ . In the final model, three predictors were significant, inspirational motivation ( $t = -1.87, p < .010, \beta = -.323$ ), contingent reward ( $t = 2.15, p < .015, \beta = .289$ ), and management by exception passive ( $t = 5.29, p < .001, \beta = .387$ ). A key recommendation is for nursing home leaders to encourage development, positive morale, and recognize employees for good performance. The implication for positive social change includes the potential to minimize employee turnover and enhance the quality of healthcare for nursing home patients.

Leadership Styles and RN Turnover Intentions in Long-Term Care Facilities

by

Kelli Casey

MA, Webster University, 2014

BS, Illinois State University, 2007

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

November 2022

## Dedication

I dedicate this doctoral study to my husband and best friend, Benjamin Neal Casey, for his love, dedication, and commitment to my journey to complete my doctoral study. Thank you for inspiring me to achieve my educational goals. Thank you for your continued encouragement, and motivation to work hard, plow through, and succeed.

## Acknowledgments

There are not enough words or time to properly thank Dr. Natalie Casale. Your honest and timely feedback, as well as your endless patience, provided the perfect structure I needed to build this study. To Dr. Charlie Shao for your expertise in quantitative research and informative feedback. To Dr. Patsy Kasen, my second committee member, thank you for your detailed review and commitment to my study. My URR, Dr. Deborah Natress, I was fortunate to have your experience and assistance. To my family, friends, and coworkers, thank you for your support. Especially, my friend, Megan Forristall, for being patient with the many reviews of grammar I sent your way and the constant rambling about my study. Lastly, I want to thank my mentor and friend John Koehler for your encouragement and support. Thank you for teaching me the world of leadership and guiding me down the path of Nursing Home Administration. My experience and the work I accomplished under your leadership is the reason for my continued interest in management and leadership.

## Table of Contents

List of Tables .....	iv
List of Figures .....	v
Section 1: Foundation of the Study .....	1
Background of the Problem .....	1
Problem Statement .....	2
Purpose Statement.....	3
Nature of the Study .....	3
Research Question .....	4
Hypotheses .....	5
Theoretical Framework.....	5
Operational Definitions.....	6
Assumptions, Limitations, and Delimitation .....	6
Assumptions.....	6
Limitations .....	7
Delimitations.....	7
Significance of the Study .....	8
Contribution to Business Practice.....	8
Implications for Social Change.....	9
A Review of the Professional and Academic Literature.....	9
Strategy for Searching the Literature .....	10

Path-Goal Theory .....	11
Alternative Leadership Theories.....	16
Turnover Intentions.....	29
Leadership Style and Turnover Intentions .....	34
Measurement of Variables .....	39
Transition .....	41
Section 2: The Project.....	43
Purpose Statement.....	43
Role of the Researcher .....	44
Participants.....	46
Research Method and Design .....	46
Research Method .....	47
Research Design.....	48
Population and Sampling .....	49
Population .....	49
Sampling .....	50
Ethical Research.....	53
Data Collection Instruments .....	55
Multifactor Leadership Questionnaire (MLQ 5x).....	56
Turnover Intention Scale (TIS-6).....	58
Data Collection Technique .....	58

Data Analysis .....	60
Study Validity .....	63
External Validity .....	64
Transition and Summary .....	65
Section 3: Application to Professional Practice and Implications for Change .....	65
Presentation of Findings .....	67
Test of Assumptions .....	68
Recommendations for Action .....	81
Recommendations for Further Research.....	82
Reflections .....	82
Conclusions.....	84
References.....	86
Appendix A: License to use MLQ 5x Short Form.....	110
Appendix B: Permission to use TIS-6 Survey .....	111
Appendix C: MLQ 5x short form .....	112
Appendix D: TIS-6 .....	114

## List of Tables

Table 1 Breakdown of Resources in the Literature Review .....	11
Table 2 Variance Inflation Factors .....	70
Table 3 Variation Inflation Factors Reduced.....	70
Table 4 Means and Standard Deviations for Predictor and Criterion Variables.....	72
Table 5 Regression Analysis Summary for Predictor Variables .....	74
Table 6 Model Summary .....	74
Table 7 Test of Normality.....	75
Table 8 Skewness and Kurtosis Descriptive.....	76

## List of Figures

Figure 1 Graphical model of G*Power Analysis to Determine Sample Size .....	52
Figure 2 Normal Probability Plot (P-P) of the Regression Standardized Residuals.....	71
Figure 3 Scatterplot of Standardized Residuals .....	71

## Section 1: Foundation of the Study

Employee turnover can have a significant impact on the success of an organization. World Health Organization (WHO) predicted that long-term care (LTC) facilities will require an additional 40 million healthcare staff to meet global healthcare demands by 2030 (WHO, 2018). The American Association of College Nursing predicted that by 2025, there will be a shortage of approximately 260,000 registered nurses (RNs) in the United States without the proper intervention (Nursing AAoCO, 2017). With the increase in workloads and healthcare shortages, healthcare organizations need additional healthcare staff (Wu et al., 2020). In addition to the cost of recruiting and training a replacement, the loss of an employee can negatively impact the continuity of operations and strategic plans and result in poor quality of care in residents (MacPhee et al., 2017).

The focus of this study was on the understanding of factors involved in leadership styles and how it relates to high turnover intentions in LTC facilities in Illinois. Leaders of LTC facilities may use the findings of this study to implement strategies for reducing high turnover intentions. The findings from this study may be helpful to use for business leaders in other industries, especially for industries with high-stress jobs.

### **Background of the Problem**

Employee voluntary turnover is a management problem that impacts healthcare organizations' strategic sustainability goals (Magbity et al., 2020). Pre-COVID-19, the Bureau of Labor Statistics (2019) estimated that by the year 2024, the RN shortage would be approximately 600,000. Therefore, job satisfaction is an essential predictor of RNs' turnover intentions. The financial cost associated with RN turnover in health care

organizations in the United States is approximately \$88,000 per nurse (Adams et al., 2019). This cost includes recruiting and training a newly hired RN who leaves within the first year, costing the organization thousands of dollars yearly and negatively affecting the quality of care (Adams et al., 2019). Post-COVID-19, the World Health Organization (2020) reported increased costs in providing personal protective equipment (PPE), training in infection control, and assessing case management. These infection control costs will likely increase the normal recruiting and training costs further.

A healthcare organization's primary resources affecting its economic interests are nursing care practices, patient outcomes, and positive environments for residents. Within the healthcare industry, organizational leaders are faced with many challenges when trying to control high turnover rates (Sfantou et al., 2017). For example, RN managers can positively or negatively impact nurse, patient, and organizational outcomes through leadership practices (Labrague, 2020). However, a review of the literature has led to the conclusion that LTC leaders often fail to see the importance of a positive work environment and the role of leadership styles for RNs and their residents. The findings of this study may contribute to minimizing turnover intentions in LTC facilities. Therefore, this study may help fill a gap concerning business practices to help leaders develop strategies about effective leadership to retain RNs.

### **Problem Statement**

The lack of active leadership cause RN shortages to impact the delivery of safe nursing care to patients in LTC facilities and create heavy workloads, often resulting in further turnover intentions (Poels et al., 2020). Replacement of RNs influences LTC

productivity, expenses, and overall performance, and has resulted in annualized RN turnover in LTC facilities up to 56.1% (Poels et al., 2020). The general business problem was that some LTC facilities have high turnover intentions due to a lack of leadership knowledge. The specific business problem was that some leaders in LTC facilities lack an understanding of the relationship between transformational, transactional leadership styles and RN turnover intentions.

### **Purpose Statement**

The purpose of this quantitative, correlational study was to examine the relationship among idealized attributes (IA), idealized behaviors (IB), inspirational motivation (IM), intellectual stimulation (IS), individualized consideration (IC), contingent reward (CR), management by exception-active (MBEA), management by exception-passive (MBEP), and turnover intentions (TI) in RNs. The independent variables were the subcategories of transformational and transactional leadership styles. The dependent variable was RN turnover intentions. The population for this study included RNs working in LTC facilities in Illinois. The findings and knowledge from this study may contribute to strategy formulation and implementation of strategies by organizational leaders to promote positive social change that could reduce employee turnover intentions, reducing the number of unemployed RNs in the community.

### **Nature of the Study**

I chose a quantitative methodology for this study. A quantitative study is conducive when describing behaviors using numbers by testing a theory, examining the relationships between the predictor and criterion variables, and analyzing statistical data

(Toinic et al., 2018). A quantitative method was appropriate for this study because I evaluated the hypothesis through the application of inferential statistics. Qualitative researchers rely on nonstandard data collection through meanings expressed in words (Saunders et al., 2016). The inclusion of a qualitative method was not appropriate for this study because the goal was not to study what experiences cause certain phenomena. Mixed-method research is a combination of quantitative and qualitative research methods (Pusa et al., 2021). Collecting and analyzing qualitative and numerical data was not a factor for this study, making the mixed method unnecessary.

I chose a correlational design for this study. A correlational design allows the researcher to observe statistical relationships between the predictor and criterion variables (Saunders et al., 2016). The aim of quasi-experimental (no randomization) and experimental designs (subjects randomly assigned to groups) involves the researcher testing a cause-and-effect relationship between two or more groups and the manipulation of one or more variables (Saunders et al., 2016). This study did not examine the cause-and-effect relationship between the predictor and criterion; therefore, quasi-experimental and experimental designs were not appropriate for this study. The correlational design was appropriate for this study because the primary objective of the study was to examine the relationship between the predictor variable leadership styles and the criterion variable RN turnover intentions.

### **Research Question**

What is the relationship among idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, individualized consideration, contingent

reward, management by exception-active, management by exception- passive, and turnover intentions in RNs?

### **Hypotheses**

Null Hypothesis ( $H_0$ ): There is no statistically significant relationship between idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management by exception-active, management by exception-passive, and RN turnover intentions in the LTC industry.

Alternative Hypothesis ( $H_1$ ): There is a statistically significant relationship between idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management by exception-active, management by exception-passive, and RN turnover intentions in the LTC industry.

### **Theoretical Framework**

The path-goal theory is the theoretical framework used as the basis of this study. When applying the path-goal model, the primary goal of the leader is to increase employee motivation, job satisfaction, and morale to further support the organization's mission (Evans, 1974). House initially proposed the path-goal theory in 1971 (House, 1971). Leadership style depends on the situation and the employees based on the theory (Evans, 1974). A leader must provide the employee with a clear and concise path to complete the goal (House, 1996). House identified four leadership styles to facilitate, coach, and reward his employees (Evans, 1974). The four leadership styles are directive,

supportive, achievement-oriented, and participative leadership (House, 1996). The path-goal model requires leaders to be flexible and adapt quickly to a leadership style that fits the situation (House, 1996). The path-goal theory is flexible and has the potential to serve as a foundation to explore leadership styles (House, 1996). Amina et al. (2021) suggested that the path-goal theory may be helpful to determine a leadership style that is best for the work environment or the employee.

### **Operational Definitions**

*Long-term care facility:* A long-term care facility, also called a nursing home, is a place that offers various services 24 hours a day, 7 days a week, both medical and nonmedical, for people who cannot care for themselves any longer (Danis et al., 2020).

*Registered nurses:* A person who has graduated from nursing school and met the requirements set by state and government agencies to obtain the appropriate licensure and care for patients (National Council of State Board of Nursing, 2020).

*Turnover intent:* Employees' consideration to leave their current employer regardless of whether they actually leave (Nelissen et al., 2017).

### **Assumptions, Limitations, and Delimitation**

#### **Assumptions**

Theofanidis and Fountouki (2019) stated that assumptions are beliefs in a research study necessary to conduct the study but cannot be proven. In this study, I accounted for several assumptions. The first assumption of this study was participants gave an honest response to the questionnaire, as inaccurate responses would negatively impact the results of this study. The second assumption was that the participants would correctly understand

the content of the questionnaire. The third assumption was that the MLQ 5x and TIS-6 are the proper tools and appropriate scales to measure the constructs. The fourth assumption was that the participants are the appropriate representation of the population selected.

### **Limitations**

Theofanidis and Fountouki (2019) stated that the limitations of a study include weaknesses that are out of the researcher's control. Limitations can affect the outcome of the study (Theofanidis & Fountouki, 2019). This study contained a few limitations. The first limitation was participants were limited to the responses offered to them on the questionnaire. Second, participants were not able to elaborate on the answers because they are required to answer closed-ended questions. Third, participants were limited to Illinois, which opens the possibility of generalizing the results. Lastly, COVID-19 has affected our society in ways beyond anything anyone has experienced. COVID-19 currently limits interaction and face-to-face contact with residents and staff in LTC facilities, causing a new set of hardships for staff, which could also have adversely affected the results of this study.

### **Delimitations**

Delimitations refer to the boundaries and limits set by the researcher so that the study is not impossible to achieve (Theofanidis & Fountouki, 2019). Delimitations for this study are the geographic location (Illinois), the target study setting (LTC facilities), and specific participants (nonmanagement RNs). I used these delimitations to perform a

detailed study on a small sample that may prove beneficial to the LTC industry by providing a deeper understanding of RN turnover.

### **Significance of the Study**

#### **Contribution to Business Practice**

This study may be of significant value for nurse managers because the recommended strategies could be helpful in efforts to reduce RN turnover in LTC facilities. The knowledge from this research has the potential to increase patient safety outcomes and decrease RN turnover, reducing the costs associated with it. High turnover intentions in LTC facilities among the RNs has been shown to lead to poor treatment of residents, low productivity, and decreased morale of RNs (Butler, 2017). There are links between leadership styles and turnover intentions that suggest certain leadership styles have a positive bearing on employees (Naseer et al., 2018). Al-Sada et al. (2017) reported that a component of path-goal theory, supportive leadership, concluded results that positively correlated with employee turnover intentions, reducing turnover rates. This study may be significant to business practice because it may provide practical solutions to issues that affect LTC facilities as it relates specifically to RN turnover intentions, reducing turnover. Understanding these issues can significantly decrease employee turnover and the costs associated with a lack of employee retention, increasing the bottom line for the organization. Also, accepting and understanding the issues can increase employee motivation, morale, and job satisfaction.

## **Implications for Social Change**

The implications for positive social change from the findings of the study include the understanding of the leadership styles that impact turnover rates in RNs, which can then drive the implementation of policy, procedures, and training to improve retention. Findings derived from this study may help organizational leaders promote positive social change and identify strategies to reduce employee intent to leave. Leaders can increase workplace satisfaction and decrease turnover with improved training programs to help engage employees and leaders (Butler, 2017). Knowledge and proper training of leadership styles may lead to increased morale, job satisfaction, and reduce turnover intentions, leading to increased delivery of safe nursing care practices in LTC and reduced unemployed RNs in the community.

## **A Review of the Professional and Academic Literature**

The purpose of this quantitative correlational study was to examine the relationship between leadership styles and employee turnover intentions in LTC facilities. The organization of the literature review consists of five significant categories: (a) literature search strategy, (b) critical analysis and syntheses of literature, (c) alternative leadership theories, (e) impact of leadership style and turnover intentions, and (d) measurement variables. In this literature review, I have analyzed an extensive body of pertinent literature related to the study's theory and variables. The independent variables are transformational and transactional leadership styles, and the dependent variable is employee turnover intentions. Poor relationships with leadership limit the potential for career and personal development and can drive turnover intentions among RNs (Maaitah,

2018). Although the focus was on RN retention in LTC facilities, reviewing the literature on employee retention and turnover in other industries added depth to the study.

Retaining quality employees provides a stabilizing force in an organization that drives productivity and innovation. Retention also has financial benefits for organizations as employee turnover incurs significant costs (e.g., recruiting and hiring costs, training costs, and organizational productivity loss; Sulamuthu & Yusof, 2018). In LTC facilities, employee turnover can result in poor care quality for residents (Poghosyan et al., 2017). Determining the relationships between leadership style and turnover intentions can help facility leaders to develop strategies to reduce turnover, positively impacting organizational success.

### **Strategy for Searching the Literature**

To search for literature, I used Walden University Library databases, including ABI/Inform Complete Academic Search, Business Source Complete, Dissertation & Theses at Walden University, Emerald Management Journals, Nursing, and Allied Health Database, and SAGE Premier. I found peer-reviewed articles for this study using the following keywords: *turnover intentions*, *voluntary turnover*, *leadership*, *job satisfaction*, *turnover costs*, *burnout*, *training*, *sustainability*, *registered nurses*, *long-term care*, and *retention*. The literature I reviewed for this doctoral study consisted of 117 sources, of which 82 (72%) were within a publication date between 2017 and 2021. The literature review included 75/114 that were peer-reviewed sources with publication dates from 2017-2021 (see Table 1).

**Table 1**

Breakdown of Resources in the Literature Review

Resources	Within 5 years	Older than 5 years	Total	Percentage
Books	0	2	2	1%
Dissertations				
Peer-reviewed articles	75	30	105	94%
Other resources	7	0	7	5%
Total	82	32	114	100%

**Path-Goal Theory**

I used House's (1971) path-goal theory as the primary theoretical framework for this study. The path-goal theory was first introduced in 1970 by Evans and then refined by House in 1971. House's path-goal theory distinguishes between leadership styles and the influence of leadership styles on employee performance and engagement. Rana et al. (2019) described the path-goal theory as a function of a leader, the characteristics of the follower, and the circumstances within which the leader and follower are operating. The path-goal theory supports the relationship between supervisors and their subordinates daily (House, 1996).

House (1971) derived path-goal theory from various aspects of the expectancy theory of motivation and determined two behavioral dimensions: instrumental and social-emotional. Instrumental behavior involves actionable behaviors that influence followers to perform specific tasks with desirable outcomes (Antonakis et al., 2017). Social-emotional behavior encompasses a leader's encoding and decoding of information and provision of social-emotional leadership (DuBrin, 2014). DuBrin (2014) suggested that instrumental and social-emotional leadership behaviors may influence employee

motivation by providing actionable and emotional support. Instrumental and social-emotional behaviors allow leaders to understand and manage social interactions, both the leader's own and those with others.

In 1996, House reformulated path-goal theory to advance the theory's impact on organizational and work unit performance to complement subordinates' abilities and compensate for deficiencies. Leadership behaviors that support motivation and empowerment for work units can influence employee behavior and improve organizational performance (Maaitah, 2018). A few dependent factors of employee motivation include routine and nonroutine tasks; interdependent, varied, and ambiguous tasks; cohesiveness and teamwork; and external and internal stressors (House, 1996). Leaders who employ the principles of path-goal theory supply employees with a clear explanation of means to perform tasks, clarification of the principles used to monitor performance, clarification of expectancies on how employees should respond, and determination to deliver rewards and punishment.

House's (1996) refined path-goal theory also includes multiple conditions for employees' adequate performance and motivation. Different classes of leadership behavior may foster employee empowerment and affect employee motivation. The eight categories of leadership behavior explained in House's reformulated theory include (a) path-goal clarifying behavior, (b) achievement-oriented behavior, (c) work facilitation behavior, (d) supportive behavior, (e) interaction facilitation behavior, (f) group-oriented decision process behavior, (g) representation and networking behavior, and (h) value-based behavior.

The leader's behavior is contingent upon the behavior and satisfaction of the subordinates. Dixon and Hart (2010) analyzed three path-goal leadership styles in a large manufacturing firm consisting of blue- and white-collared workers. The three methods analyzed include (a) participative, (b) supportive, and (c) instrumental leadership (Dixon & Hart, 2010). All three leadership styles were significant and positively impacted workgroup effectiveness and employee turnover, thereby supporting path-goal theory and the connection between successful workgroups, increased employee retention, and leadership styles of management and influence on organizational performance (Dixon & Hart, 2010). This conclusion aligns with other business research showing that when leaders clarify the importance of team alignment and fundamental goals and moderate their leadership style to align with the situation they confront, they may have a beneficial and relevant impact on business performance (Naseer et al., 2018).

Other research supports Dixon and Hart's (2010) finding that workgroup effectiveness and employee retention improve internal organization performance. One focal area has been the use of performance management systems, such as performance reviews, which some researchers asserted are supportive of goal theory (O'Boyle & Cummins, 2013). Performance management aligns with the path-goal theory by clarifying leaders' tasks and goals to improve organizational performance, ensuring outputs are congruent with organizational goals.

Employee work engagement is significant to the employee's behavior and leadership involvement. Edwards-Dandridge et al. (2020) defined work engagement to measure how employees relate to their workplace work and behavior. Rana et al. (2019)

conducted a study on coffee trading companies in Kenya. The results indicated that participative leadership significantly influenced employee performance and that employees' task structures facilitated the relationship between leadership styles and employee performance. Participative leadership involves extending the decision-making process to followers, making a more engaging workplace, and resulting in positive motivation.

When leaders play a pivotal role in influencing employee interactions and behaviors, organizations may reap the benefits (Alfanny, 2018). A leader's style and behaviors may connect to employee expectancies. Edwards-Dandridge et al. (2020) defined job satisfaction as measuring how employees feel about their work environment, conditions, and the work itself. A leader can influence an organization's success by providing clear instructions regarding the achievement of performance goals, offering rewards for employees for achieving these goals, and removing obstacles that may be stopping employees from achieving these goals (Clack, 2021). Leaders can impact employee performance through motivation, clarification, removal of obstacles, and implementation of rewards.

Situational factors, directive or participative leadership styles, and behaviors all enhance the connection with employee motivation and expectancies (Malik, 2013). However, when the perceptions of the reward systems are similar between performers and nonperformers in an organization, a reward system's impact is redundant and irrelevant, a concept different from path-goal theory (Malik, 2013). The different perceptions of reward systems between House (1996) and Malik (2013) may compel

organizational leaders to emphasize accountability and transparency. Leaders can influence situations that hold employees accountable. Path-goal theory links corporate sustainability through accountability and transparency, guiding leaders' impact on situational influences.

Four variables (followers' self-assurance, degrees of job challenge, incentive rewards, and situational uncertainty) could contribute to the lack of organizational sustainability because leadership characteristics impact each variable (Landrum & Daily, 2012). Kumar and Krishnaraj (2018) deduced that leadership styles influence how motivated employees provide an increase in quality of care. Hoch et al. (2018) emphasized that the type of leadership style a leader uses influences employee job satisfaction and that there is a link between job satisfaction and employee retention. Kumar and Krishnaraj concluded that when leaders encourage employee participation in decision-making, employees are more motivated to excel at the services they provide. Therefore, it is necessary to ensure leaders establish characteristics to help keep awareness of the four variables (self-assurance, degrees of job challenge, incentive rewards, and situational uncertainty) to impact employee job satisfaction and retention.

Duan et al. (2016) discovered that when leaders empower employees, trustful relationships develop, engaging staff creativity. Duan et al. also discovered that when leaders hold staff accountable and have high ethical standards, employees respond with creativity. Path-goal theory may contribute to the perceptions of leaders' influence and impact on employee and organizational performance and increase employees' retention. House's (1996) path-goal theory explains the diverse types of leadership behaviors and

styles. Leaders may want to consider the importance of ensuring the preparation of various techniques and strategies to (a) influence employee motivation, (b) influence employees' adherence to industry standards, and (c) influence the willingness of leadership to help guide an organization to success. Leadership influence and strategies may become important in guiding organizational change and performance. Therefore, supporting the path-goal theory concepts helps strengthen leadership communication and improve turnover intentions in LTC facilities.

### **Alternative Leadership Theories**

The examination of alternative leadership theories is beneficial to understand the similarities and alternative views when examining the relationship between leadership styles and employee turnover intention. A review of the literature included motivational hygiene theory, Maslow's hierarchy of need theory, and transformational and transactional leadership styles. Each leadership theory has limitations that would constrain the scope of this study.

### ***Motivation Hygiene Theory***

Herzberg introduced the two-factor theory, also known as the motivation-hygiene theory, in 1959, after interviewing 203 accountants and engineers working in nine factories in Pittsburgh (Herzberg et al., 1959). Herzberg (1974) stated that motivation theory suggests that motivators are inherent to situations such as personal achievement, recognition, or advancement opportunities. Dissatisfiers consist of hygiene factors related to job policy, job security, compensation, salaries, or subordinate relationships (Herzberg,

1974). The two-factor theory suggests that leaders should apply both motivators to increase job satisfaction and hygiene factors to avoid employee dissatisfaction.

Regarding hygiene factors, Vlacsekova and Mura (2017) defined salary as a form of employee compensation for performing their duties. Vlaseskova and Mura stated that factors such as dissatisfaction, pay, and low motivation levels increase turnover. According to Alshmemri et al. (2017), if a manager applies the Herzberg motivation-hygiene theory and introduces motivators to employees, the employees are more likely to reach organizational goals effectively. Other factors that motivate employees to meet goals are career advancement, increased benefits, salary, and praise (Al Mamun, 2017). However, absenteeism, poor conditions, unclear guidance, and low wages fail to motivate employees, causing decreased job satisfaction (Bossler & Broszeit, 2017). Hauret and Williams (2019) emphasized that poor conditions and decreased job satisfaction increase employees' likelihood of leaving their current position. Therefore, key factors that motivate employees' job satisfaction and decrease turnover are career advancement, good working conditions, recognition, and salaries. Keeping high standards increases employee retention, job satisfaction, and meeting overall organizational goals.

Researchers often apply Herzberg's theory to align with the conceptual or theoretical framework to understand employees' motivating factors related to retention (Ashraf, 2020). Herzberg's two-factor theory can help researchers examine the relationship between job satisfaction, motivation, retention, and actual employee turnover (Park, 2021). Mahzan and Abidin (2017) emphasized that Herzberg's motivation-hygiene theory is a good foundation for understanding employee job satisfaction and

dissatisfaction. Therefore, decreasing hygiene dissatisfier factors can increase the level of satisfaction amongst employees.

Hur (2017) stated that job satisfaction is a significant factor in employee motivation and productivity. Satisfied employees produce a higher quality of work and are better motivated. Alrawahi et al. (2020) used Herzberg's theory to highlight employees' motivating factors and the relationship between those motivating factors and employee retention among medical laboratory professional in Oman. Using Herzberg's theory, Alshmemri et al. (2017) surveyed 272 nurses in three hospitals in Saudi Arabia. Alshmemri determined that hygiene factors are not as crucial to the nurse's job satisfaction. Motivation was the leading factor when it came to job satisfaction. Hence, employees who feel valued, experience growth and development, and feel meaning and achievement in their work will most likely achieve organizational goals and have high-performance standards.

Garza and Taliaferro (2021) conducted a study using the motivation-hygiene theory to understand home healthcare nurses' job satisfaction and turnover intentions. Garza and Taliaferro were able to identify factors by collecting data from 12 home healthcare nurses in South Texas. The themes identified were (a) leadership impacts job satisfaction, (b) occupational stresses influence job satisfaction, (c) safety concerns, and (d) poor communication. Garza and Taliaferro's study may have confirmed part of the motivation-hygiene theory's proposition, notably that one contributor to employee turnover is dissatisfaction with the leadership styles. Leaders define the organization's

culture through their leadership behaviors and how they demonstrate themselves daily; effective leadership will significantly improve employee motivation and performance.

The hygiene theory has several merits; however, the following are some of the identified criticisms of the theory: (a) biased research methodology, (b) inconsistency in the use of work motivation, and (c) exclusion of individual differences (Lin et al., 2015). First, Herzberg has criticisms because few researchers have replicated the result from the study (Ewen et al., 1966). Results from Herzberg's study are inconsistent with the results from similar studies (Ewen et al., 1966). Second, the concept of work motivation does not include an explanation or definition of individual differences and needs (Parsons & Broadbridge, 2006). Lastly, human behavior is not universal. People have different ways of achieving their needs, and different conditions motivate them (Tuch & Hornbaek, 2015). For example, social affections, respect, and social status are more important than safety needs for some individuals.

King (1970) noted that the five hygiene factors, (a) job policy, (b) job security, (c) compensation, (d) salaries, or (e) subordinate relationships of Herzberg's theory, are inconsistent. A researcher cannot effectively test a hypothesis based on a theoretical framework when the researcher cannot be sure which version of the theory is applicable. When an interpretation of a theory is ambiguous, the challenge may be in using the approach to justify a research hypothesis. Herzberg's two-factor theory has criticisms because of the ambiguity of the factors that cause job satisfaction and dissatisfaction (Tuch & Hornbæk, 2015). Conflicting perspectives on the theory exist among researchers regarding job satisfaction and job dissatisfaction.

### *Maslow's Hierarchy of Need*

Herzberg's (1974) theory suggests that motivators are associated with higher-order needs and hygiene factors are more like lower-order needs in Maslow's (1954) need hierarchy. Maslow (1943) was one of many prominent motivational theorists of the 20th century. Maslow developed the hierarchy of needs theory based on how humans satisfy various personal needs. Maslow theorized that human needs can be categorized in an ascending hierarchy of physiological needs, (b) security needs, (c) love and belonging needs, (d) esteem needs, and (e) self-actualization needs. Physiological needs include food, air, eating, drinking, sleeping, and sex, which must be satisfied before the individual can progress to the next level of satisfaction (Maslow, 1943). Through Maslow's theory, management must meet this need by providing workers with reasonable salaries to obtain suitable housing and food. Next are safety and security, which means freedom from danger or threats (Maslow, 1943). Mokoka et al. (2011) conducted a study in South Africa on 108 RNs examining the relationship between RN's intent to leave and the safety and security at their current employer. Per the hierarchy of needs, Mokoka et al. concluded that improvement of deficiency in the needs of safety and security would improve hiring processes and filling positions. However, Mokoka et al. emphasized that increased salaries did not necessarily retain RNs. In regard to love and belonging, when social needs such as friendship, family, and affection are present, they activate esteem needs, enhancing a person's feelings of respect, appreciation, and recognition (Rahman & Nurullah, 2014). Each level in Maslow's hierarchy of needs may help leaders to develop

strategies to increase personal performance by addressing organizational safety and creating a good working environment.

Maslow (1943) argued that people enjoy higher orders of need if the lower needs are sustainable. Self-actualization is the peak of the hierarchal pyramid and refers to attaining their fullest potential (Maslow, 1943). Rahman and Nurullah (2014) recommend applying Maslow's motivational theory as a business doctrine that encourages high employee retention and a working environment that contributes to job satisfaction. Fisher and Royster (2016) gathered feedback from four mathematics teachers that supported Maslow's hierarchy and identified the best ways to support teachers effectively in various stages of their professions. Understanding the framework of Maslow's theory and the levels of the teacher hierarchy of needs, administrators can understand the needs of teachers at different points in their careers.

Herzberg's two-factor theory is similar to Maslow's hierarchy of needs in that both speak to motivation for the employee; however, the theories have a slight dissimilarity. In the hierarchy of needs, Maslow (1943) suggested that an individual's needs are achievable when a healthy lifestyle develops. Maslow was specific in distinguishing the categories of human needs, including physiological needs at the bottom of the hierarchy. In contrast, through a two-way premise such as hygiene and motivators, people achieve two needs in the two-factor theory. Herzberg et al. (1959) was more particular in physiological needs and indicated that people are more motivated when they attain self-actualization than Maslow's hierarchy of needs. Herzberg et al.'s objectives were that

motivation should be the central attitude among individuals. Maslow and Herzberg et al. suggested that an individual must achieve a precise set of needs to be satisfied.

### ***Transformational Leadership***

Burns (1978) developed the transformational leadership style theory, emphasizing the relationship between leaders and followers. Leaders who use a transformational leadership style create a relationship with followers that earns their trust and inspires them to look beyond self-interest to join in advancing the organization's goals (Sulamuthu & Yusof, 2018). Transformational leadership style is a relational form of leadership that motivates followers to accomplish change to make a difference to benefit the common good of an organization. Similarly, Ferreira et al. (2020) defined transformational leadership as a leadership style that presents a clear vision and inspires employees to work toward that vision. Transformational leadership style inspires trust in their employees and motivates them to go over and beyond their regular duties to reach organizational goals.

With transformational leadership styles, followers are motivated to increase performance levels in the pursuit of organizational goals and realize the development of previously untapped potential (Ferreira et al., 2020). Followers of transformational leaders experience less job stress and less burnout, ultimately increasing their job satisfaction (Pishgooie et al., 2019). Transformational leaders need to foster positive changes in the workplace by improving the planning process, modeling ethical behavior, and developing competent workers (Magbity, 2020). Additionally, adopting transformational leadership style can mitigate staff burnout and increase well-being,

ultimately increasing the quality of care in patients (Seljemo et al., 2020). As leaders use transformational leadership style, the effects of the use result in positive outcomes in employees and increase work performance.

In a study examining leadership style on employee job satisfaction, employee retention, and organizational productivity, Kleinman (2004) found a significant relationship between transformational leadership and leader effectiveness. The literature reviewed by Kleinman indicated that leaders need to participate in continuing education on the importance of staff collaboration, communication, and leading with a clear vision for the organization. To evaluate the effectiveness of transformational leadership style, employers assess the extent to which employees identify and share an enjoyable working relationship with the leader and if they accept that their working conditions are fair (Kleinman, 2004). Azaare and Gross (2011) conducted a study that included 284 nurses from two hospitals in the Eastern Region of Ghana. The study focused on employee satisfaction and found that employees preferred a manager who provided a positive working relationship, proactive leadership, and support. A transformational leader's actions and characteristics can create an environment that fosters staff collaboration, employee motivation, and employee satisfaction, which leads to the development of high-performing employees and a positive work environment. The two studies are in different industries but share the effectiveness of transformational leadership style.

Al Sabei et al. (2020) examined the influence of toxic and transformational leadership practices on nurses' job satisfaction. Their findings indicated that education, training, and professional development are key strategies of transformational leadership.

According to Al Sabei et al., if leaders keep up with current leadership practices, they can foster a positive work environment through their leadership behaviors. Therefore, leaders that possess transformational leadership characteristics achieve positive effects on the working culture of the organization.

Employees are motivated by leaders that foster organizational commitment. Park and Pierce (2020) conducted a cross-sectional study of public child welfare agencies. One key finding in the study was that the transformational leadership style negatively impacted turnover intentions (Park & Pierce, 2020). Additionally, transformational leaders can control organizational commitment and reduce turnover intentions (Park & Pierce, 2020). Pishgooie et al. (2019) supported the connection between leadership style and leader effectiveness. The authors found a strong relationship between the effectiveness of the transformational leadership style, job satisfaction, and turnover intentions. Leaders that emphasize clear objectives, detailed missions, and respect the views and values of the employee help to raise employee confidence and a sense of self-efficacy, leading to a decrease in turnover intentions.

The relationship between transformational leadership style and patient safety outcomes may result in nurse managers creating a positive and healthy working environment. Healthy work environments include safe staffing levels, supportive, positive work influences, and supportive coworkers (Wei et al., 2020). Al Sabei et al. (2020) emphasized that studies have linked transformational leadership style to improved patient safety outcomes in healthcare, such as higher care satisfaction, decreased patient fatality, and decreased adverse patient events. Akbiyik et al. (2020) confirmed that

leadership behaviors that concentrated on relationship-focused leadership attributed to improved patient outcomes and improved quality of care.

Transformational leaders employ four behavioral components to motivate employees to achieve organizational goals: (a) idealized influence, (b) individualized consideration, (c) intellectual stimulation, and (d) inspirational motivation (Sulamuthu & Yusof, 2018). These transformational leadership dimensions can significantly impact employees' work effort, commitment, job satisfaction, and turnover intentions. The impact involves a positive effect the leader triggers among employees to produce the same end goal in an organization. Wu et al. (2020) suggested that when employees recognize their value in the workplace, they may seek to demonstrate their work as meaningful to the organization.

Idealized influence, also referred to as charisma, is described as the leader's ability to influence followers to emulate the leader's behaviors (Sulamuthu & Yusof, 2018). Charisma is an essential trait of transformational leadership and the element through which leaders can attract, motivate, and lead others (DuBrin, 2014). Individualized consideration is a leader's characteristic that is supportive and provides a compassionate climate for its employees.

In a study conducted with 153 staff nurses from Ittegaq Hospital in Lahore, Pakistan, Naseer et al. (2018) found the dimensions of idealized influence and individualized consideration were the most crucial factors contributing to employee intentions to stay. Using a transformational leadership style, nurse managers ensured support, equality, and trust with those under them to reduce turnover intentions.

Managers who exhibit characteristics of idealized influence and individualized consideration act as role models for their followers and produce positive results for the organization through individual support (Jambawo, 2018).

Intellectual stimulation offers employees the ability to be creative, innovative, and challenge themselves (Jambawo, 2018). Transformational leadership style influences employees through motivation and empowerment (Jambawo, 2018). Inspirational motivation is a leadership characteristic that fosters teamwork, communication, and cohesiveness among employees to inspire employees to be committed to the organization (Jambawo, 2018). When employees commit to a shared vision, it produces positive changes in workplace culture and moves employees beyond their self-interests and toward the organization's greater good. Leaders who exhibit this trait show their followers that their actions follow their words, building trust and establishing them as role models for their followers.

Rapid changes in the health care field and increased turnover intentions mean nurse managers need effective leadership styles. Majeed and Jamshed (2020) suggested that many factors influence nurses' turnover intentions. Some of the influences are a stressful work environment, heavy workloads, job satisfaction, poor coworker interaction, and incompetent leaders (Majeed & Jamshed, 2020). Additionally, Al Sabei et al. (2020) stated that having an adequate number of nurses to patient ratio and administrative (management) support factored into nurses' turnover intentions. Therefore, effective leadership styles, such as transformational leadership, in healthcare are crucial in improving and enhancing healthcare systems' effectiveness (Goh et al., 2018).

### ***Transactional Leadership Style***

Burns (1978) developed the transactional and transformational leadership models as individual leadership behaviors. Transformational leadership styles are highly effective in industries such as the military, factories, hospitals, and educational environments where transactional leadership styles are not (Fernandes, 2018). While transformational leaders will try to change organizational cultures, transactional leaders will work within the existing culture (Fernandes & Fresly, 2017; Manoppo, 2020). The transactional leadership style involves an exchange between leaders and their employees (Park & Pierce, 2020).

Bass (1990) stated that transactional leadership provides employees with the ability to achieve a goal, feedback on progress, and distribution of rewards for reaching the achievement of a goal. Feedback to employees is in the form of positive and negative punishments (constructive). The primary basis for transactional leadership stems from the leader's need to achieve organizational goals (Worthy et al., 2020). To achieve organizational goals, leaders use three types of styles: contingent reward (CREW), management by exception-active (MBEA), and management by exception-passive (MBEP) (Boamah & Tremblay, 2018; Haase & Franco, 2020).

Transactional leadership is a style based on controlling, organizing, and planning employees' responses according to specific situations using three types of styles: CREW, MBEA, and MBEP. CREW leaders are directive in nature, providing specific goals, performance standards, and promise rewards or discipline for poor performance (Boamah & Tremblay, 2018; Haase & Franco, 2020). MBEA involves close monitoring by the

leader to identify errors and intervene to correct those errors (Boamah & Tremblay, 2018; Haase & Franco, 2020). Intervening to correct errors only after they have become a severe problem is MBEP (Boamah & Tremblay, 2018; Haase & Franco, 2020). Leaders who practice all three leadership styles (CREW, MBEA, and MBEP) and the behaviors of transactional leaders will encourage individual and organizational success through a process-oriented leadership style. In CREW, MBEA, and MBEP, both the leader and follower focus on completing specific tasks and requirements. Regardless of the leaders' method, the transactional leadership style creates a lack of in-depth and the capability to develop resentment between the leader and follower.

Günzel-Jensen et al. (2018) suggested that transactional leadership is closely related to cultural maintenance leadership, introduced by Trice and Beyer (1993), which focuses on strengthening organizational structure, strategies, and culture. Hambrick and Mason (1984) described the upper-echelon theory as an active form of strategic leadership to improve organizational effectiveness. Günzel-Jensen et al. emphasized that transactional leadership falls in line with cultural maintenance leadership and upper echelons theory by managing and focusing on day-to-day tasks. Transactional leaders exchange value with the employee when the employee reaches established organizational goals, meeting organizational effectiveness.

The practice of transactional leadership will create a bond between leader and subordinate to obtain organizational goals through collaboration and communication. Haase and Franco (2020) stated that transactional leaders provide an environment that fosters communication and collaboration and creates a commitment between leader and

employee. However, Northouse (2015) emphasized that transactional leaders do not foster an environment that promotes employee growth. RNs in LTC facilities need to be in an environment that promotes growth, education, and development to elevate stress and intentions to leave an organization.

### **Turnover Intentions**

Researchers have devoted considerable effort to developing models that explain and predict voluntary turnover. Turnover intentions are the warning sign an employee gives before quitting a job (Sökmen et al., 2015). Turnover intention is the probability that an employee will change their job in the future (Aniley et al., 2020; Sökmen et al., 2015). Turnover can be in the form of resignation, dismissal, or the death of an employee (Manoppo, 2020). High turnover rates in an organization are disadvantageous because of the cost of replacing the employee and the disruption it causes to the work environment (Aniley et al., 2020). In healthcare, high turnover results in poor work organization, increased workloads, staff shortages, and the potential to decrease the quality of care and patient safety (Poels et al., 2020). Therefore, implementing leadership strategies can improve organization culture and turnover intentions, and improved organizational culture yields increased patient outcomes and safety.

Replacing highly skilled employees can be costly and challenging because healthcare positions require a specific skill set. Al Zamel et al. (2020) emphasized that nursing manpower is one of the most critical resources in the healthcare organization, and RNs are one of the most critical elements to the success of a healthcare organization (Al Zamel et al., 2020). The global nursing shortage is one of the highest growing healthcare

issues today (Al Zamel et al., 2020; Aniley et al., 2020) as a significant number of RNs are reaching retirement age (Edwards-Dandridge et al., 2020). According to Al Sabei et al. (2020), RN shortage will continue to increase as the baby boomer generation of nurses retires from the profession. Al Sabei et al. suggested that the baby boomer generation's retirement will cause an imminent threat to the nursing workforce.

Constant nurse turnover is a serious concern because of its impact on the quality of care, continuity of care, loss of knowledgeable staff, and replacement costs (Al Zamel et al., 2020; Aniley et al., 2020; Naseer et al., 2018). Nursing turnover also has a negative impact on the staff in an organization related to morale because understaffing leads to decreased effectiveness and productivity (Aniley et al., 2020). In 2020, the average turnover cost for hospital RNs ranged from \$33,300 to \$56,000 (not counting the cost associated with overtime work by other RNs), resulting in the average hospital losing \$3.6 to 6.1 million annually (Nursing Solutions Inc, 2020). According to Aniley et al. (2020), there are potential cost savings by implementing effective strategies to reduce nurse turnover by understanding interrelationships between individual, organizational, and environmental factors. Nurse turnover is associated with insufficient staffing levels causing increased nurse burnout, job dissatisfaction, decreased quality of care in patients, and increased costs to the facility.

Leaders who promote employee satisfaction and motivation may be effective in reducing employee turnover. Edwards-Dandridge et al. (2020) conducted a quantitative correlational study to examine the relationship between work engagement, job satisfaction, and nurse turnover in hospitals. Edwards-Dandridge et al. concluded that

their study's findings could assist management teams of hospitals in focusing their efforts to retain RNs. Furthermore, the improved retention of RNs could result in lower recruiting, hiring, improved patient safety, and satisfaction. As a result, this will improve the healthcare organization's financial viability and economic sustainability (Edwards-Dandridge et al., 2020).

Characteristics that influence employees' intent to stay include leadership behaviors, support and consideration of staff, high visibility of management, and willingness to share leadership responsibilities (Kleinman, 2004). Greinacher et al. (2021) identified that stress and leadership had the most substantial impact on dissatisfaction among nurses and their intent to leave the organization. Employees leave the nursing profession because of workload, workplace environment (Naseer et al., 2018), salary disagreement, and lack of career development (Aniley et al., 2020). However, the most dominant reason for leaving the nursing profession is leadership style (Naseer et al., 2018). Pishgooie et al. (2019) conducted a correlational cross-sectional study between 2016–2017 of nurses working in government hospitals in Iran. The researchers concluded a positive correlation exists between leaders who anticipated problems, resolving the problems by interacting with employees, and employee turnover intentions. Similar to Pishgooie et al.'s study results, Naseer et al. (2018) conducted a quantitative, cross-sectional survey to examine the impact of leadership styles on staff nurse turnover. With a response rate of 76%, the researchers collected data in Lahore, Punjab, from 153 staff nurses. The researchers concluded a significant negative correlation between transformational leadership style and turnover. Al Zamel et al.

(2020) stated that nurse shortage is a global problem and according to Gizaw et al. (2017) up to 54% of nurses worldwide intend to leave the nursing profession all together. The United States is one of the countries that face this ongoing issue. Therefore, it is essential to examine the relationship between transformational leadership and turnover in developing countries and resource-poor countries to develop strategies for the worldwide turnover issue with RNs.

Employees may decide to leave a job for several reasons, such as external compatible job demands, compensation, job satisfaction, job stability, and management (Sulamuthu & Yusof, 2018). Both transformational and transactional leadership styles positively affect employee performance; therefore, increasing employee intent to stay (Sulamuthu & Yusof, 2018). Robbins and Davidhizer (2020) emphasized that transformational leadership is crucial in healthcare to maintain and retain RN's and achieve overall patient satisfaction. Transformational and transactional leadership styles functions are independent but complementary constructs (Bass, 1990).

An employee's intention to leave an organization results from a cognitive process in which the employee considers their current situation and reasonable options assesses their desire to leave the job, and begins making plans to leave (Shila & Sevilla, 2015). To interrupt this cycle, leaders must identify the issues causing the turnover intentions and implement strategies to counteract those factors (Marufu et al., 2021). During the turnover intention process, employees' productivity could lack due to decreased engagement (Sulamuthu & Yusof, 2018). Organizational leaders must correct the issues

causing employees to consider leaving to break the cycle and stop the turnover intentions from becoming actual turnover.

Retaining employees can play an essential role in maintaining productivity and eliminate the additional costs of replacing and training (Aniley et al., 2020; Sulamuthu & Yusof, 2018). However, many factors may impact an employee's final decision to leave an organization regardless of intent (Sökmen et al., 2015; Sulamuthu & Yusof, 2018). Job market demand may play a role in the employee's ability to act on their turnover intentions (Sun & Wang, 2016). Sun and Wang (2016) suggested that the risks and costs associated with leaving a job may cause the employee to remain in their current position regardless of their turnover intentions. Costs may include financial costs, transaction costs, and psychological costs (Sun & Wang, 2016). Employees may also be concerned with achieving their career progression and goals (Aniley et al., 2020). A leader who does not support or assist in those career goals may provide employees incentive to consider other options and increase turnover intention (Alhamwan & Mat, 2015). Leadership and job satisfaction directly or indirectly impact many of the factors identified and is the focus of this study.

Despite the many factors that impact an employee's final decision to leave an organization, one of the main components identified by Coomber and Barriball (2007) is stress and leadership. Similarly, Özden et al. (2017) emphasized the importance of fair leadership, leaders' awareness of power-sharing, and how leadership affects RN job satisfaction during challenging times. Senek et al. (2020) indicated that the findings

showed that a lack of fairness and ethical leadership could have severe consequences on nurses during difficult and challenging times, such as the COVID-19 pandemic.

### **Leadership Style and Turnover Intentions**

Leaders and leadership do not have the same meaning, but the terms tend to be attached to each other (Manoppo, 2020). Leadership is the person's ability to influence or direct a person's behaviors to achieve an organization's goals (Manoppo, 2020). A leader is a person that implements leadership behaviors (Manoppo, 2020). An organization's leaders can play a positive or negative role in influencing employees' turnover intentions. Leadership style can assist in forming the experience of employees (McKenna & Jeske, 2020). Previous literature indicates that an organization's leaders play a critical part in employee retention (Malik & Khalid, 2016). Voluntary turnover can happen in two ways. The first is unpreventable turnover, including illness, family obligations, and retirement (Manoppo, 2020). The second form of turnover is preventable turnover; this includes employee dissatisfaction and leadership (Manoppo, 2020).

Leadership styles influence employees' decisions to leave an organization. Marufu et al. (2021) conducted a systematic review of the factors influencing retention among hospital nurses. The researchers found that transformational leadership style negatively correlated with turnover intentions and moderated the relationship between turnover intentions and actual employee turnover. Among workers in the United States, 16.5% of employees reported they planned to leave their job because the leadership behaviors exhibited by their direct supervisor did not align with the characteristics

desired (Ariyabuddhiphongs & Kahn, 2017). Therefore, based on the type of leadership employed, leaders can predict employee turnover.

Khalid et al. (2016) reported a direct relationship between leadership styles and employee turnover intentions in the banking industry. Gyensare et al. (2016) confirmed that an employee's affective commitment mediated the relationship between leadership style and turnover intention. Additionally, Khalid et al. concluded that job satisfaction significantly moderated the relationship between leadership style and turnover intentions.

Addressing issues involving dissatisfaction with leadership styles and practices holds the potential to reduce employee turnover intentions. Employees may choose to leave an organization for several reasons. Considerations for leaving may include pay, benefits, high workloads, emotional exhaustion, or relationships with leaders (Marufu et al., 2021). A discrepancy between desired and actual outcomes in any of these areas can lead to employee turnover. Employees consider changing jobs because of what they perceive as ineffective leadership regardless of whether they like the organization or the mission they are working with.

A less-than-satisfying relationship with leadership can outweigh a good employee fit with the organization. For industries that rely on qualified and competent employees, retention of those employees is crucial for organizational success. Leadership styles may impact several aspects of employee perceptions, behaviors, and actions that affect employee turnover. The significance of the relationship between leader and employee is that an employee's belief of favorable or unfavorable interactions can coerce employees to consider leaving the organization. Erceg and Suljug (2016) reported that 71% of the

participants stated that interpersonal relationships were essential in job satisfaction and turnover intentions. The relationship between interpersonal relationships, job satisfaction, and turnover intentions is significant enough that employees may consider positions with lower salaries to work with an effective leader (Alatawi, 2017). Alonderiene and Majauskaite (2016) found that leadership style directly affected employee job satisfaction, affecting employee turnover intentions. Additionally, Alonderiene and Majauskaite also confirmed that a transformational leadership style strongly correlates with job satisfaction and turnover intention more than a transactional leadership style. Therefore, transformational leaders form relationships with the employees they supervise, and that will increase job satisfaction and reduce employee turnover intention.

Leaders should not underestimate the importance of interpersonal relationships within the workplace. An employee's relationship with a supervisor has a higher impact on turnover intentions than peer relationships and organizational environment (Kleinman, 2004; Poghosyan et al., 2017). A transformational leadership style can affect employee turnover intentions through the characteristics of idealized influence, individualized consideration, intellectual stimulation, and inspirational motivation (Seljemo et al., 2020). The four transformational leadership characteristics (idealized influence, individualized consideration, intellectual stimulation, and inspirational motivation) enable employees to act beyond their own needs and act for the organization's greater good (Seljemo et al., 2020). Leaders who employ a transformational style can provide inspiration, nurture a trusting relationship that builds respect, and develop their employees' self-worth and confidence, creating a connection that decreases turnover intentions (Caillier, 2016).

According to Seljemo et al. (2020), transformational leadership positively affects the work environment of healthcare professionals. Furthermore, leaders that facilitate a good work environment with a balance between employee motivation and employee support may see a decline in employee turnover intentions.

Transformational leaders can develop and change the organizational culture, ultimately reducing employee turnover. Leaders can create an environment of psychological empowerment that decreases employee turnover (Sahu et al., 2018). A transformational leadership style can produce more significant outcomes than other styles by increasing the relationship between leader and employee (Seljemo, 2020). The findings of the study conducted by Boamah and Tremblay (2018) supported the psychological aspect of employees' turnover intuitions and ways transformational leadership creates a supportive environment and nurse job satisfaction. Similarly, Seljemo et al. (2020) emphasized that leaders play an important role in balancing job demands and job resources within the workplace, positively influencing nurse job satisfaction, engagement, and psychosocial work environment. A transformational leader's dimensions contribute to an employee's personal needs, minimizing their leaving the organization (Boamah & Tremblay, 2018). The individualized attention a transformational leader provides can increase employee commitment and retention (Boamah & Tremblay, 2018). The individualized consideration dimension of the transformational leadership style reduces turnover intentions by engaging employees and meeting their individual needs (Caillier, 2016). Overall, transformational leadership traits stimulate employees to be inspired and allow for individual growth and development.

Transformational leaders show a personal interest in their employees by employing human resources programs to promote individual development and career progression (Caillier, 2016). The support for individual needs and goals that transformational leadership provides decreases the likelihood of employees looking for other employment opportunities to meet their goals (Boamah & Tremblay, 2018). A transformational leader's characteristics create an environment in which the employee feels empowered and a significant part of the organization (Boamah & Tremblay, 2018; Günzel-Jensen et al., 2018). An employee who is satisfied with their development and advancement opportunities is less likely to consider leaving the organization and be more motivated to contribute to organizational goals.

Transformational leaders invariably build a bond between the employee, the leader, and their organization by conveying the organizational goals and mission and tying those to the individual employee's growth and development (Caillier, 2016). They can develop an environment that fosters growth and development that links the employee to organizational planning and success (Grissom et al., 2015). Providing employees with personal goals can motivate them to work toward a shared goal (Yahaya & Ebrahim, 2016). Transformational leaders enhance the workplace environment and set positive examples so that workers may achieve organizational goals.

Employees who are comfortable in their work environment are less likely to look for other employment opportunities when they perceive a beneficial relationship with their leadership (Madden et al., 2015). A positive work environment with supportive leaders has a negative impact on turnover intention (Al-Hamdan et al., 2016). The

transformational leadership dimension of idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration has empowered employees to bond with their supervisors and organizations. Employees with such a connection are likely to be more productive and less motivated to leave the organization. In healthcare, effective strategies that engage employee productivity, satisfaction, and motivation improve turnover intentions, and ultimately, improved patient outcome (Muddle, 2020). The opportunities and shared identity the transformational leaders develop in their employees can lead to greater motivation and satisfaction, leading to decreased turnover actions.

### **Measurement of Variables**

#### ***Multifactor Leadership Questionnaire 5x (MLQ 5x)***

A popular measure of leadership style is the MLQ, developed by Bass et al. (2003) in 1985. For this study, I used the MLQ 5x to measure the independent variable leadership styles. Permission to use the MLQ-5x is available in Appendix A. Bass and Avolio (2004) developed the most recent version of the MLQ-5 in 2002, which is a multiple-rater survey that measures the frequency of leadership behaviors using a five-point frequency scale (1 = *not at all*, 2 = *once in a while*, 3 = *sometimes*, 4 = *fairly often*, and 5 = *always*; Bass et al., 2003). The MLQ 5x is a questionnaire that measures transformational, transactional, and laissez-faire styles (Clipa & Greciuc, 2018). The MLQ 5x is used to assess how employees perceive themselves concerning specific leadership behaviors (Bass & Avolio, 2004; Bass et al., 2003).

The MLQ 5x is an acceptable instrument to use because it shows strong evidence of validity (Bass et al., 2003). The current version of MLQ 5x has 36-item questionnaires with nine subscales: five items on the transformational scale, three items on the transactional scale, and one item on the laissez-faire scale. Idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration are four of the twenty transformational aspects that are measured (Batista-Foguet et al., 2021). Researchers continue to refine the MLQ since its first use to strengthen its validity. Antonakis et al. (2003) used 3000 participants to assess the psychometric properties of the MLQ. Antonakis et al. discovered that the MLQ clearly distinguished nine factors in the full range of the leadership model, similar to the path-goal theory. The results of Antonakis et al. study revealed strong support for the validity of the MLQ. The Cronbach's  $\alpha$  for the MLQ has reliability ranging between .70 to .94 on all three dimensions and strong support for the validity (Boamah & Tremblay, 2018; Kanste et al., 2006; Worthy et al., 2020).

### ***Turnover Intention Scale (TIS-6)***

For this study, I used TIS-6 to measure the dependent variable employee turnover intentions. The TIS-6 measures an employee's intent to leave or stay a job (Akgunduz & Eryilmaz, 2018). Professor Gerdt Roodt developed the 15-item scale in 2004 to measure employee turnover intentions (Bothma & Roodt, 2013). Later, Roodt (2004) developed a shorter version of TIS that included 6 of the original 15 items. Researchers use the TIS-6 scale to assess an employee's intent to leave an organization. The TIS-6 measures six items on a 5-point Likert scale ranging from 1 (*never to always*) to 5 (*highly likely*;

Roodt, 2004). Permission to reproduce and use the TIS-6 for noncommercial research is available in Appendix B.

The TIS-6 is an acceptable instrument to use because it can significantly distinguish between the leavers and stayers (Bothma & Roodt, 2013). Bothma and Roodt (2013) confirmed TIS-6 reliability ( $\alpha=.80$ ). Additional studies conducted by Jacobs and Roodt (2007); Malik and Khalid (2016); and Takawira et al. (2014) indicated the TIS-6 has an internal consistency reliability coefficient in the range of 0.79 to 0.97.

### **Transition**

In Section 1, I examined the relationship between path-goal theory and RN turnover intentions in LTC facilities. Section 1 included a discussion of the background of the problem statement, purpose statement, research question, and hypotheses. Included in this section are the introduction of the theoretical framework of path-goal theory, operational definitions of key terms, discussion of assumptions, limitations, delimitations, and examination of the significance of the study. This section also included a review of professional and academic literature consisting of (a) an examination of path-goal theory, (b) motivation-hygiene theory, (c) Maslow's hierarchy of needs, (d) transformational leadership style, (e) transactional leadership style, (f) turnover intentions, (g) leadership styles and turnover intentions, (h) multifactor leadership questionnaire, and (i) turnover intention scale.

Section 2 includes a description of the role of the researcher in a quantitative study and the purpose statement. Section 2 also includes an explanation of the criteria for participants, research method, research design, population, and sampling. Additionally,

this section includes a discussion regarding research ethics and the Institutional Review Board's (IRB) requirements. In Section 2, I will explain the MLQ 5X and TIS-6 data collection instruments and the technique I selected for this study. Lastly, I will explain data analysis procedures and how I ensured the study's validity and reliability. Section 3 includes the results obtained from the application of instruments presented in Section 2. In Section 3, I also discuss the results, confrontation of the results against the hypothesis introduced in Section 1, and opportunities for future research.

## Section 2: The Project

In this study, I examined the relationship between transactional leadership, transformational leadership styles, and RN turnover intention in LTC facilities across Illinois. Understanding some of the leadership factors that may affect the intentions of RNs to stay with their current employment was the focus of this study. This section consists of a description of my role as the researcher, the role of the participants, an explanation of the research method and design, and the types of instruments selected for the data collection. I identify the data analysis techniques used and the evaluation process to ensure the validity of this study.

### **Purpose Statement**

The purpose of this quantitative, correlational study was to examine the relationship among idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management by exception-active, management by exception-passive, and turnover intentions in RNs. The independent variables were the subcategories of transformational and transactional leadership styles. The dependent variable was turnover intentions. The population for this study included RNs working in LTC facilities in Illinois. The implications for positive social change may include the potential to help leaders in LTC facilities to develop training programs that highlight components of the path-goal theory leadership style to decrease RN turnover intentions. Organizational leaders may use the findings from this study to promote positive social change by the identification and implications

of strategies that could reduce employee turnover intentions, reducing the number of unemployed RNs in the community.

### **Role of the Researcher**

The role of the researcher is to determine what data need to be collected, what data instrument tools will be used, and identify which variables impact specific elements (Saunders et al., 2016). As the researcher, my objective was to answer the research question: What is the relationship between leadership styles and employee turnover intentions in the LTC industry? Quantitative researchers use a data collection technique, such as a questionnaire, to generate or use numerical data (Saunders et al., 2016). Using a data collection source such as a questionnaire offers researchers one chance to collect the data; therefore, it is imperative to plan what data to collect (Saunders et al., 2016). Another role of the researcher is to ensure the data collected are valid and reliable. For a questionnaire to be valid, it must be reliable (Saunders et al., 2016).

My role as the researcher was to ensure the research was ethical and closely followed the necessary protocols as articulated by the authors of the 1979 *Belmont Report* (U.S. Department of Health & Human Services, 1979). The 1979 *Belmont Report* identified the basic ethical principles to follow when conducting research that involves human subjects and include (a) respect for persons, (b) beneficence, and (c) justice (Adashi et al., 2018). Along with the 1979 *Belmont Report*, it was essential to adhere to the institutional review board (IRB) regulations to protect the privacy and confidentiality of participants. Privacy refers to the protection of the individual, and confidentiality refers to protecting the data (Sieber, 1992). Managing the confidentiality of the

participants' data is essential to protect the participant's privacy. The objective of this study was to collect data from participants via electronic study. Once the data was collected, I downloaded it into a database for review, analysis, and interpretation. The purpose of collecting and analyzing the raw data for this study was to examine the relationship between leadership styles and employee turnover intentions in LTC facilities. I will keep all data on a password-protected USB and be locked in a safe, which only I can access for security purposes. The data will be held for 5 years after the completion of the study, as required by Walden University.

I have previously worked with RNs in an LTC facility as an executive assistant to the administrator. Throughout my work experience at the LTC facility, I have learned about the challenges RNs experience in the workplace. There were no prior relationships with the participants of this study or any experiences within the geographic area. Simundic (2013) defined bias as a deviation from the truth in data collection, analysis, or interpretations, leading to false conclusions. A quantitative study must present an accurate representation of the data to support the validity of the study (Park & Park, 2016). The goal of a researcher should be to identify potential bias in the study design implementation and minimize potential bias wherever feasible (Malone et al., 2014). It is also important that the researcher understand their personal lens and not allow it to distort the viewpoints shared by the participants (Ross, 2017). Therefore, to prevent any potential influence or bias, it was essential to limit any discussion of my experience, knowledge, or belief principles with participants and to adhere to the Belmont Report. Further, I had no interaction with the participants. Limited access was necessary for LTC

facilities due to COVID-19. Therefore, the administrators received individual packets to give to the participants that fit the criteria for the study.

### **Participants**

The population for this study consisted of RNs in nonmanagement positions working in the LTC industry. The eligibility criteria for this study are: (a) being an RN, (b) in an LTC facility, and (c) in a nonmanagement position. I did not include the length of employment as a criterion for my study because it would narrow my population field, causing difficulty getting the sample size in the geographic location. My primary focus in this study was understanding the role of leadership styles and the effects they have on turnover intentions in RN in LTC facilities. Therefore, nonmanagement RNs working in LTC were appropriate for this study. I gained access to participants by contacting the administrators employed at five LTC facilities in Illinois and discussed my goals for the intended study. The participants were provided with a letter of invitation and a voluntary consent form to each survey participant. The invitation letter advised that the participant's consent and participation in the study are voluntary, and the participants can withdraw their consent at any time. Their responses remain confidential, and I hold their responses in a location only accessible to me.

### **Research Method and Design**

There are three main research methods: (a) qualitative, (b) quantitative, and (c) mixed methods (Saunders et al., 2016). It was my responsibility as the researcher to determine the appropriate research method and design based on the information provided to answer the research question. For this research study, I used a quantitative

correlational research method and design to examine the relationship between two independent variables (transactional and transformational leadership styles) and the dependent variable (RN turnover intentions). I used the MLQ 5x and TIS-6 to collect the data to test the hypothesis.

### **Research Method**

A quantitative method involves a researcher examining numerical data (measurable and quantifiable data) as it pertains to a research question and testing a hypothesis (Saunders et al., 2016). A researcher will use a quantitative method to address specific research questions and hypotheses with numerical data (Saunders et al., 2016). Quantitative research involves numbers and measurements, which researchers use to conduct statistical analysis about the data in a deductive approach (Saunders et al., 2016). I chose quantitative research to explore the relationship between leadership styles and RN turnover intentions.

Researchers who use qualitative research methods investigate a phenomenon from multiple sources of evidence, such as semi-structured interviews, secondary data, and case studies (Yin, 2018). Researchers that use a qualitative research method regularly use a subjective approach to learn from the participants (Yin, 2018). A qualitative research method was not appropriate for this study because I am interested in exploring the relationship between two variables and not the perspectives related to the strategies of retaining employees.

The mixed-method study is a combination of qualitative and quantitative methods (Saunders et al., 2016). A mixed-method research study can be challenging, time-

consuming, and complex (Saunders et al., 2016). A mixed method was not appropriate for this study based on time constraints to conduct the study.

### **Research Design**

Acting as a roadmap for a research project, there are four designs for a quantitative study: (a) correlational, (b) descriptive, (c) experimental, and (d) quasi-experimental (Bloomfield & Fisher, 2019). The purpose of the design is to connect the data to the research question(s) using three elements (plan, structure, and strategy) that lead to a conclusion (Bloomfield & Fisher, 2019). This quantitative study has a correlational design, which I selected to examine the relationships between subcategories of the variables transformational leadership style, transactional leadership style, and turnover intentions of RNs.

A correlational research design is the most popular design amongst quantitative research (Wells et al., 2015). A correlational design involves the researcher collecting data from surveys or questionnaires without manipulating or controlling the variables (Bloomfield & Fisher, 2019). The results from the data are interpreted and analyzed through statistical techniques to determine how a variable relates to another variable (Saunders et al., 2016). The purpose of this quantitative correlational study was to examine the relationship between leadership styles and employee turnover intentions; therefore, a correlational design was appropriate for this study.

Researchers that use either an experimental or quasi-experimental design examine a cause-and-effect relationship between two variables with manipulation of the independent variable, introducing the potential for bias (Handley et al., 2018; Saunders et

al., 2016). However, researchers using an experimental design will employ the randomization of participants, and quasi-experimental researchers will not use randomization (Gerring, 2010; Saunders et al., 2016). A quasi-experiment is difficult to conduct compared to a randomized experimental design because a quasi-experiment lacks the element of random assignment, giving the researcher control of the assignment (Saunders et al., 2016). It is imperative to avoid bias in this study; therefore, experimental and quasi-experimental are not appropriate for this study.

### **Population and Sampling**

#### **Population**

The sample population for this study consisted of RNs employed in LTC facilities located in five cities in Illinois. This study used the path-goal leadership theory to examine the relationship between leadership styles and RN's intention to stay at their workplace. To examine factors that could affect nurse turnover intentions, I selected RNs employed in LTC facilities in Illinois due to the convenience and access of RNs based on my ability to conduct research locally. There are approximately 143,250 RNs employed in Illinois (Bureau of Labor Statistics, 2020). Illinois Nursing Workforce Center (2020) conducted a study in 2020 to survey how many RNs work in the different areas of the nursing field in Illinois. A total of 41,983 surveys were returned, reporting a 22% response rate. The results concluded that 9% of the RNs in Illinois work in LTC (The Nursing Workforce Center, 2020). An opportunity to recruit a proportionate population from a large population of RNs for data collection in this study by selecting RNs in

Illinois. One hundred and ninety-six RNs from five LTC facilities received an invitation to participate in the study.

### **Sampling**

In this study, I selected participants using nonprobability sampling. The goal was to recruit RN participants with characteristics that included active employment (a) as a RN, (b) in an LTC facility, and (c) in a nonmanagement position in Illinois. The target population is a subsection of the population to help the researcher narrow the focus and fulfill the goals of the study (Saunders et al., 2016).

There are two types of sampling techniques: nonprobability and probability sampling (Saunders et al., 2016). Nonprobability sampling is a sampling technique where the selection of participants is not known (Saunders et al., 2016). Nonprobability sampling can potentially have a selection bias if the sample is not truly represented (El-Masri, 2017). There are four steps in probability sampling: (a) identify sampling frame based on the research question, (b) decide on suitable sample size, (c) select a sampling technique, and (d) sample is a representation of target population (Saunders et al., 2016). Probability sampling has known parameters, eliminates bias, and selection is random (Saunders et al., 2016); since selection is not random, the probability technique was not appropriate for this study.

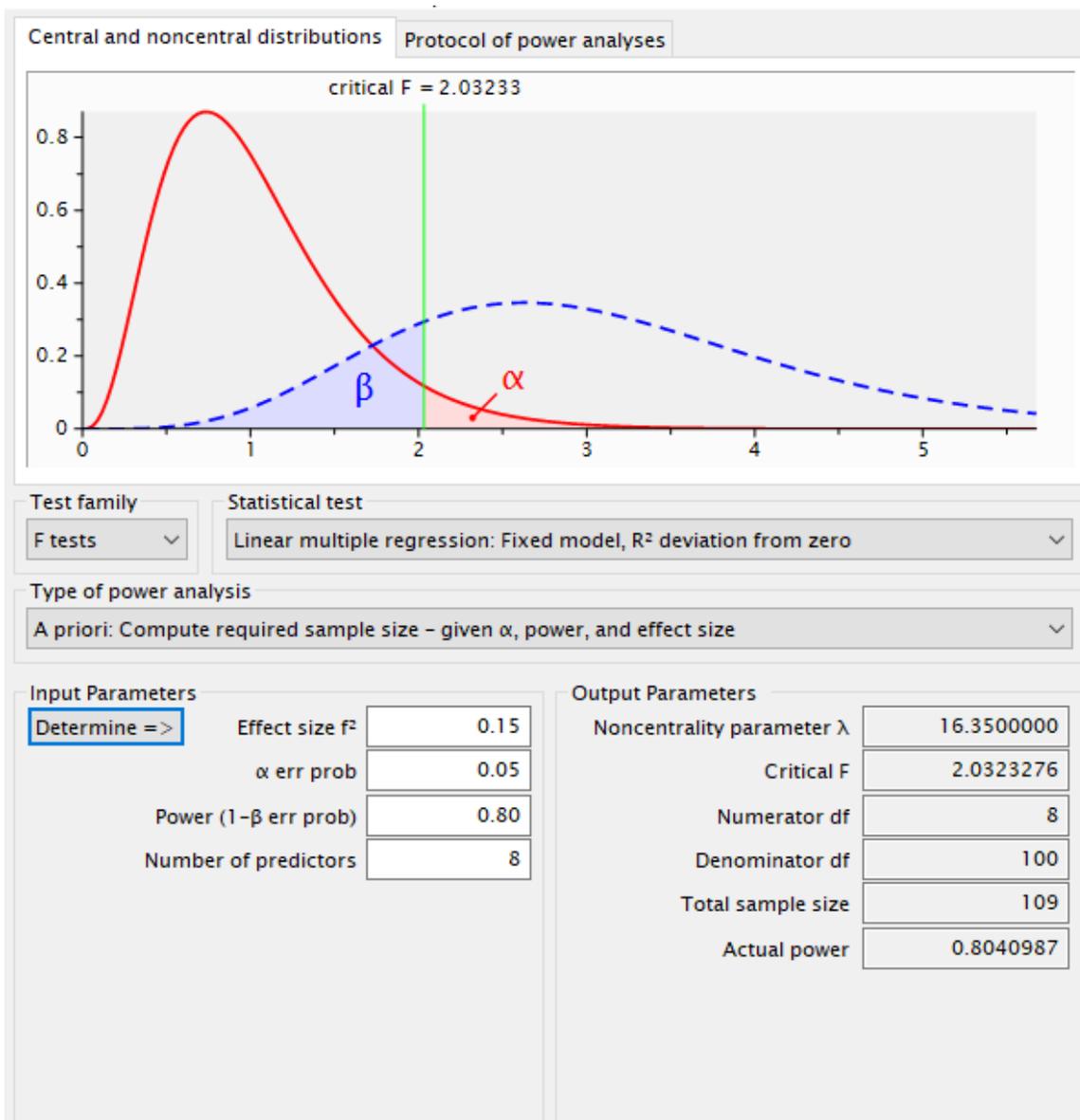
The sampling frame is the database where I identified my targeted populations. For this study, I selected employees from participating LTC facilities. I emailed an assistant director over five LTC facilities in Illinois, discussed my proposal, and set up a time to meet the five administrators and discuss my plan of action to disperse the study.

The final decision was to allow me access to all eligible RNs' emails. Upon receiving the emails, I sent out 196 emails to possible participants. The email consisted of my invitation letter, QR code, and web link to access the survey.

The online questionnaire consisted of an informed consent form, the MLQ 5x, and TIS-6. The MLQ 5x measures the independent variables of leadership style (see Appendix C), and TIS-6 measures the criterion variable turnover intentions (see Appendix D). I determined the suitable sample size using a priori power analysis for a multiple regression using G\*Power 3.1, setting the F test with power  $(1-\beta)$  of .80 based on eight predictor variables to detect a medium effect size of  $f^2 = .15\%$ . The calculated sample size I used is 109 (see Figure 1).

**Figure 1**

*Graphical model of G\*Power Analysis to Determine Sample Size*



I selected nonprobability using a convenience sampling technique because I did not know who would participate in the survey. The nonprobability convenience sampling method helped me choose only RN's that fit the participant criteria. Etikan et al. (2016) asserted that nonprobability convenience sampling enables researchers to obtain a target population that meets certain practical criteria in their study, such as easy accessibility to the research, geographical proximity, and availability.

Pickett et al. (2018) found better response rates of nonprobability sampling over probability sampling. Probability sampling limits the sample and potentially creates sample bias (Pickett et al., 2018). Nonprobability sampling consists of five techniques: consecutive, convenience, purposive, quota, and snowball sampling (Saunders et al., 2016). I chose the convenience sampling technique for this study because the participants are easily accessible, limit the cost of the study, and meets the geographic proximity.

### **Ethical Research**

Ethical compliance is a necessary component to a researcher and their study. Ethics is a set of standards that guide the researcher's behavior concerning the subjects of their work or those that might be affected by their work (Saunders et al., 2016). As the researcher that designed and conducted this study, I used active RNs in LTC facilities to answer a survey. Therefore, I had to consider the values and principles of ethical conduct as established by Walden University Institutional Review Board (IRB). Walden University's IRB approval number is 12-23-21-0751838, expiring on December 22, 2022.

Ethical compliance occurs throughout the process of the study from the research design, data, requirement of participants, informed consent process, confidentiality, the privacy of participants, storage, and availability of data (Kaewkungwal et al., 2019). Fein and Kulik (2011) highlighted privacy and confidentiality, one of the three themes emphasized in the *Belmont Report*. Privacy refers to the protection of individuals, and confidentiality refers to the protection of the data (Sieber, 1992). However, to protect the participant's privacy, I managed the confidentiality of the participant's data by keeping the research submissions and results confidential for 5 years. For security purposes, all research submissions and results will be safely stored on a USB with an encrypted password and stored in a locked safe, to which only I will have access.

Safeguarding both access and meaning are distinct strategies to achieve confidentiality (Fein & Kulik, 2011). I considered safeguarding access to data. For example, Saari and Scherbaum (2011) have adopted protocols to safeguard access for their studies because of the ability and requirements to store participant data over a long period. However, storing data over a long period increases the vulnerability of who accesses the data (Fein & Kulik, 2011).

The second strategy noted by Fein and Kulik (2011) is safeguarding meaning. The purpose of this strategy is to manage the risk involved in violating any participant's privacy (Fein & Kulik, 2011). The way to manage risk related to the meaning of the data is to encrypt the identification information of the participants that connects them to research data. Many academic researchers use this approach by attaching a unique researcher-generated code to multilevel, multisource, or longitudinal data (Fein & Kulik,

2011). Therefore, determining the strategy that best suits the research and its participants is essential. Decisions on how to safeguard access and meaning of the data should rely on the number of individuals who will have access to the data, the length of time the data is in an identifiable state, and the interest of multiple stakeholders (Fein & Kulik, 2011).

I safeguarded both access and meaning for my research study. Collection and storage of the data is in a password-protected folder on a USB with an encrypted password. The data will be stored for a 5-year term to protect the confidentiality of the participants. After the expiration of the 5-year term, I will destroy all electronic data to comply with research confidentiality and compliance regulations. Because the survey data will come to me from Survey Monkey as deidentified, I will focus more heavily on safeguarding access.

Additionally, each participant received an informed consent form to acknowledge the purpose of the study, an understanding of their rights as a participant, and their rights to confidentiality. The informed consent also disclosed that participation in this study is entirely voluntary, and anyone can withdraw from the study at any time. Participants did not receive any benefits or compensation for participating in this study.

### **Data Collection Instruments**

In a quantitative research study, researchers use instruments for their data collection. As a researcher, I can opt to develop an instrument suitable for the data I intend to collect. However, developing an instrument is complicated and requires proficiency in areas such as validity, reliability, question design, and measurements (Saunders et al., 2016). Therefore, for this study, I adopted standard instruments to ensure

validity and reliability. Data for this study was collected using the MLQ 5x short form and the 1975 version of the TIS-6 survey. SurveyMonkey was used as the web host for the data collection instruments. According to LaFollette (2018), SurveyMonkey is a tool researchers can use to create surveys and gathering data results. Appendices A and B contain permission to use the MLQ 5x short form and the TIS-6 survey.

### **Multifactor Leadership Questionnaire (MLQ 5x)**

The Multifactor Leadership Questionnaire (MLQ 5x) is a data collection instrument that measures leadership theory. The MLQ 5x is a multiple-rater ordinal survey, which measures the frequency of leadership behaviors using a five-point frequency scale (1 = *not at all*, 2 = *once in a while*, 3 = *sometimes*, 4 = *fairly often*, and 5 = *always*; Bass et al., 2003). The MLQ 5x short form consists of a 45-item survey divided into three dimensions, developed by Bass and Avolio (2004).

For this study, I used two of the three dimensions: transformational leadership style and transactional leadership style. The MLQ 5x measures five areas of transformational leadership: (a) idealized influence, (b) idealized behaviors, (c) inspirational motivation, (d) intellectual stimulation, and I individualized consideration (Bass & Avolio, 2004). The next section of the MLQ measures transactional leadership. The three subsections for transactional leadership are (a) contingent reward, (b) active management by exception, and (c) passive management by exception (Bass & Avolio, 2004). Once the surveys are complete, I downloaded them into SPSS, and a report is generated based on the responses. Participants rated the extent of their immediate supervisor in specific behaviors on a 5-point scale. Since some items in the MLQ 5x are

negatively worded, reverse scoring is necessary. Reverse scoring is when the numerical scoring scale runs in the opposite direction. This helps to ensure that participants are paying attention to the numbers they are selecting when taking the survey. I did not use reverse scoring to avoid inconsistencies in the data.

According to Kanste et al. (2006), researchers continue to refine the psychometric qualities to increase internal consistency and validity. Kanste et al. investigated the psychometric properties of the MLQ among nurses in a nationwide postal survey in Finland. A questionnaire must contain reliable questions and have internal validity. According to Saunders et al. (2016), the most common method for calculating internal consistency is Cronbach's alpha. The Cronbach's alpha measures the consistency of responses, consisting of an alpha coefficient with a value between 0 and 1 (Saunders et al., 2016). The MLQ has reliability with a Cronbach's alpha ranging between .70 to .94 on all three dimensions and strong support for the validity (Boamah & Tremblay, 2018; Kanste et al., 2006). Bass and Avolio (2004) supported the validity of the measurement model and the factor structure of the MLQ 5x short form using confirmatory factor analysis (CFA). The results of the CFA are as follows: comparative fit index (CFI) = .91, goodness-of-fit (GFI) = .91, adjusted goodness-of-fit (AGFI) = .90, and root mean square error of approximation (RMSEA) = .05 (Boamah & Tremblay, 2018). Boamah and Tremblay's (2018) CFA results compared to the results of Bass and Avolio. The results confirm the factor structure of the 45-item survey and consistency.

### **Turnover Intention Scale (TIS-6)**

Roodt developed the TIS-6 in 2004 to measure employee turnover intentions (Bothma & Roodt, 2013). The TIS-6, a six-item scale, was adapted from a 15-item scale initially developed by Roodt in 2004 but was not published (Bothma & Roodt, 2013). Bothma and Roodt (2013) certified TIS-6 as a valid and reliable 15-item instrument to measure an employee's intent to leave an organization by measuring four or six items on a 5-point Likert scale with options ranging from 1 (*never to always*) to 5 (*highly likely*) (Bothma & Roodt, 2013). Bothma and Roodt used the TIS-6 scale on a sample size of 2,429 South African participants. The Cronbach's alpha confirmed from Bothma and Roodt's study is 0.80, which is on an acceptable level. Therefore, since .80 is an acceptable level, this assures the reliability of the scale for this study.

The TIS-6 can consist of four or six-item questions. Vermeir et al. (2018) conducted a study with 303 intensive care nurses as their participants using the data collection instrument TIS-6. The survey consisted of four yes-no questions, with Cronbach's alpha ranging from 0.761 to 0.942 (Vermeir et al., 2018). The internal consistency reliability of the TIS-6, whether the researcher uses a four or six-item, is within an acceptable range. Bothma and Roodt (2013) showed positive internal consistency, which demonstrated that the TIS-6 is a valid instrument for this study.

### **Data Collection Technique**

In this study, a questionnaire is applicable to collect data from RNs working in LTC facilities. According to Saunders et al. (2016), questionnaires are the most widely used survey tool. The traditional data collection method for quantitative studies has been

the questionnaire-based survey, conducted using paper and pencil (Takatsuki et al., 2018). According to Takatsuki et al. (2018), online surveys result in quick delivery and return because of the advancement of technology. I collected data by hosting an online questionnaire created through the secure web host SurveyMonkey website. The online questionnaire consisted of an informed consent form, the MLQ 5x, and TIS-6. The MLQ 5x measures the independent variables of leadership style (see Appendix E), and TIS-6 measures the criterion variable turnover intentions (see Appendix F).

The benefits of an online questionnaire include rapid delivery, low cost, and convenience for respondents, all of which allow researchers the ease of efficiency (Takatsuki et al., 2018). Similar disadvantages to a paper-based questionnaire are present in online questionnaires, such as low response rate, potential sample bias, and inability to reach individuals (Nulty, 2008). To avoid selection bias, the administrator of each nursing home agreed to allow access to all eligible RNs work emails in their facilities. Each eligible RN received an email with an invitation letter informing them of the objective of the study, information regarding how the confidentiality and anonymity of each participant will be handled, and instructions on how to access the website or QR code so the participant can provide consent. The participants accessed the SurveyMonkey questionnaire either with a link provided or with a QR code to scan from their cell phones. The survey was available to participants online for 1 month to ensure completion of the sample size goal. Once the participants completed the surveys, I transferred the data from SurveyMonkey to SPSS software for analysis.

## Data Analysis

The research question for this study is: What is the relationship between transformational leadership style, transactional leadership style, and RN turnover intentions in the LTC industry. The hypotheses for this study are:

Null Hypothesis ( $H_0$ ): There is no statistically significant relationship between idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management by exception-active, management by exception-passive, and RN turnover intentions in the LTC industry.

Alternative Hypothesis ( $H_1$ ): There is a statistically significant relationship between idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management by exception-active, management by exception-passive, and RN turnover intentions in the LTC industry.

The statistical correlation and regression models helped me to examine the relationship between the independent and dependent variables. I employed multiple linear regression to determine the combined effect of leadership styles to predict the strength their impact has on turnover intention using SPSS software. The summarization can be visual in histograms or box plots (Kaliyadan & Kulkarni, 2019).

Multiple linear regression analysis is a statistical technique used to evaluate whether the independent variables can predict the dependent variable (Saunders et al., 2016). A researcher will use multiple regression analysis to examine the relationship

between two or more independent variables and a dependent variable (Saunders et al., 2016). I used multiple linear regression analysis for this study because the goal is to evaluate the extent to which the subcategories of transformational and transactional leadership styles affect turnover intentions.

There are five major validations for multiple linear regression analysis: multicollinearity, the normality of error, homoscedasticity, linearity, and independence of errors (Green & Salkind, 2016). Not meeting assumptions can result in erroneous findings, Type 1 errors, or Type 2 errors. If there is a correlation between the dependent variable and two or more independent variables, they have a strong correlation, making inferences problematic, and multicollinearity exists (Green & Salkind, 2016). A high correlation among variables reduces the reliability of the analysis (Tamura et al., 2019). To eliminate multicollinearity from the linear regression analysis, I calculated the variance inflation factor (VIF). A VIF value of 1 indicates no correlation, and a value of greater than 10 indicates a strong correlation (Saunders et al., 2016). VIF values greater than the cutoff value of 5 indicate the possible presence of multicollinearity (2016).

The one-way analysis of variance (ANOVA) is applicable when a study has multiple independent variables. The ANOVA test determines if there are any differences amongst the groups, but it will not clarify which group is different (Connelly, 2021). I explored the relationship between leadership styles and turnover intentions and not the variability between groups. ANOVA does not provide information regarding relationships between variables and, therefore, is not appropriate for this study.

To address missing data through a process called data cleaning. I used listwise deletion. Missing data has a significant effect on conclusions that are drawing from the data. Missing data can lead to a smaller sample size than anticipated, which could compromise the validity and reliability of the study (Kwak & Kim, 2017). According to Kang (2013), the most common way to address missing data is through listwise (case deletion). Listwise deletion is a method of deleting any survey missing one or more missing values (Kang, 2013). The advantage of using listwise deletion is that all sets of data are common for analysis. However, the disadvantage is that listwise deletion requires missing completely at random (MYCAR) data, distorting or bias in the parameters (Kang, 2013). I did not include incomplete surveys in the data analysis.

The data assumptions pertaining to statistical analysis in multiple regression are (a) homoscedasticity, (b) independence of residuals, (c) linearity, (d) multicollinearity, (e) normality, and (f) outliers (Green & Salkind, 2016). Tests included in this study are normality, linearity assumptions, and multicollinearity assessments for multiple regression model. The assumption of homoscedasticity indicates equal values across groups and uses a scatterplot of residuals to test (Jeong & Jung, 2016). The independence of residuals assumes that observations between and within groups are independent and is tested by a scatterplot of residuals (Jeong & Jung, 2016). The assumption of linearity indicates that the relationship between the independent and dependent variables must be linear and uses a scatterplot of residuals to test (Jeong & Jung, 2016). I did not use scatterplots to test assumptions, I used Shapiro-Wilk test. Multicollinearity is present when variables are highly correlated, and a scatterplot of residuals is the appropriate test

to use (Jeong & Jung, 2016). The assumption of outliers is a value that differs substantially from the rest of the data, and scatterplots of residuals is the appropriate test to use (Green & Salkind, 2016).

To correct violations of assumptions, I used bootstrapping. Bootstrapping uses a sample as a substitute population from which I will draw replacement samples (Warton et al., 2017). Effects were computed for each of 2,000 bootstrapped samples, and a 95% confidence interval was computed by determining the effects at 2.5<sup>th</sup> and 97<sup>th</sup> percentiles.

I entered the data from SurveyMonkey into SPSS software version 28 to test the hypothesis. I did not include incomplete surveys or surveys that do not meet the inclusion criteria in the analysis to prevent a lack of data integrity. I will retain the MS Excel spreadsheet with the data analysis for 5 years.

### **Study Validity**

Researchers conducting a quantitative study need to understand the threats to validity. There are two main threats to validity: internal validity and external validity (Saunders et al., 2016). Saunders et al. (2016) emphasized that internal validity refers to the factors in a cause-and-effect relationship in observable behaviors. Roe and Just (2009) defined internal validity as the researcher's ability to claim that observed correlations are a casual interaction. Internal validity applies to observations that occur in different populations at different times and why one event led to another, such as experiments and quasi-experiments (Yin, 2018). This study was limited to one population and a specific set of participants; therefore, internal validity threats do not apply to this study.

## **External Validity**

Saunders et al. (2016) emphasized that study validity will be consistent among other settings and different groups. I limited the sample selection for this study because the participants required a specific criterion to address the research question. I calculated a priori sample size using the G\*Power 3.1 that generated a targeted sample size of 109 participants. The sample selected was RNs employed in LTC's facilities. Therefore, findings from this study applied only to populations with similar selection characteristics. Erroneous findings in the statistical validity include error Type I and II. Blumberg et al. (2014) described Type I error as a person wrongly convicted of a crime and Type II error as a person acquitted while they were guilty. Therefore, Type I error rejects the null hypothesis while it is true, and Type II error accepts the null hypothesis even though it is false (Saunders et al., 2016).

The survey instruments that I used in this study are the MLQ 5x and TIS-6. MLQ is widely used to assess leadership styles (Popli & Rizvi, 2015). The TIS-6 uses a six-item scale, which provides a more accurate indication of the turnover intentions over other instruments based on a smaller number of items that lack construct validity (Bothma & Roodt, 2013). Statistical conclusion validity refers to the use of appropriate statistical techniques, meeting statistical assumptions to enhance the ability to draw the correct inference from the data (Cor, 2016). The Cronbach's  $\alpha$  for the MLQ measures 0.834, with the  $\alpha$  for transformational and transactional measures 0.934 and 0.841, respectively (Popli & Rizvi, 2015). Dimitrov and Darova (2016) conducted an analysis of

the scales and subscales of the MLQ and found acceptable internal validity and construct validity that corresponds with Bass and Avolio's (2004) theory model.

According to Bothma and Roodt (2013), validation testing of the TIS-6 generated a Cronbach's alpha of .80, justifying the use of the scale as a valid and reliable measurement to assess employee turnover intentions. Additional studies conducted by Jacobs and Roodt (2007); Malik and Khalid (2016); and Takawira et al. (2014) indicated the TIS-6 has an internal consistency reliability coefficient in the range of 0.79 to 0.97. The instruments that I selected are appropriate for the research design and method of this study to effectively measure the relationship between transformational, transactional, and employee turnover intentions.

### **Transition and Summary**

In Section 2, I defined the research method and design, as well as the rationale for selecting a quantitative, correlational study to examine the research topic. I explained my role as the researcher, defined the criteria for participants, and stated the reason for selecting probability sampling. I discussed the targeted population for this study, using the MLQ 5x as the data collection tool and multiple linear regression to test the hypothesis regarding the relationship between path-goal theory and RN turnover intentions. In Section 3, I will include an overview of the research study, the findings, translated results, applications to business practice, implications for social change, and further research recommendations.

### **Section 3: Application to Professional Practice and Implications for Change**

The purpose of this quantitative, correlational study was to examine the relationship among idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management by exception-active, management by exception-passive, and turnover intentions in RNs. The independent variables were the subcategories of transformational and transactional leadership styles. The dependent variable was turnover intentions. The population for this study included RNs working in five LTC facilities across Illinois. The results of the statistical tests were applied to the data from 110 RNs working in LTC facilities across Illinois.

To test the assumptions, I used the boxplot diagram and probability plots (P-P) diagram. Additionally, I conducted a multiple regression analysis using SPSS 28 to test the significance of the regression model. I used bootstrapping, using 2,000 samples to reduce the influence of assumption violations. A 95% confidence interval was computed for the bootstrapping by determining the effects at the 2.5<sup>th</sup> and 97.5<sup>th</sup> percentiles. Based on the results of the tests, there were violations of the normality and homoscedasticity assumptions. Therefore, I employed wild bootstrapping. The regression model as a whole was statistically significant. The model was able to significantly predict turnover intentions:  $F(8,101) = 8.539, p < .001, R^2 = .40, R^2_{adj} = .36$ . The  $R^2_{adj}$  (.36) value indicated that approximately 36% of the variation in turnover intentions were accounted for by the linear combination of predictor variables (IA, IB, IM, IS, IC, CR, MBEA, and MBEP). In the final model, the subcategories IM ( $t = -1.87, p < .010, \beta = -.323$ ), CR

( $t=2.15$ ,  $p<.015$ ,  $\beta=.289$ ), and MBEP ( $t=5.29$ ,  $p<.001$ ,  $\beta=.387$ ) were the only significantly associated variables with turnover intentions.

In this section, I present the findings of the study, applications to professional practice, implications for social change, recommendations for action, and recommendations for further research. Additionally, I include an evaluation of the statistical tests I performed of the data using SPSS, version 28. The statistical tests performed were descriptive statistics, the test of assumptions (normality, multicollinearity, homoscedasticity, and independence of error), and multiple regression analysis.

### **Presentation of Findings**

I conducted correlation and multiple regression analyses to examine the relationships between leadership styles, transactional and transformational leadership, and RN turnover intentions in LTC facilities across Illinois. The purpose of the examination was to determine if there was a statistically significant relationship between the variables to accept or reject the research hypotheses. The data came from RNs working in the LTC facilities in Illinois. Participants completed an internet survey hosted by SurveyMonkey.

The reliability of all variables in this study is considered strong as a result of all reliability values being more than .7 (actual value was .809). With a value of .7 or above, it indicates that all questions within the scale are measuring the same thing (Saunders et al., 2016). In addition to the reliability of all variable findings, I discuss the testing of assumptions, present descriptive statistics, and conclude with a concise summary. My

goal of this hypothesis testing was to examine whether a relationship existed between the subcategories of transformational and transactional leadership styles and RN turnover intentions.

### **Test of Assumptions**

I used SPSS 28 to test and evaluate each assumption before analyzing the data to ensure that there were not any violations. The test conducted were (a) multicollinearity, (b) outliers, (c) normality, (d) linearity, (e) homoscedasticity, and (f) independence of residuals. I used bootstrapping, using 2000 samples to help the influence of assumption violations. Testing the assumptions of multiple regression analysis is recommended to identify if any violations have occurred that could cause data bias (Saunders et al., 2016).

#### ***Multicollinearity***

I evaluated multicollinearity by examining the tolerance and variance inflation factor (VIF) of predictor variables included in this study. Multicollinearity is indicated when tolerance value levels are less than 10 and VIFs are greater than 5 (Saunders et al., 2016). The results of the multicollinearity evaluation indicated that 6 out of 8 variables' bivariate correlations were moderate to strong (see Table 2), therefore the assumption of multicollinearity showed evidence of violation because more than half of the variables correlated to each other. However, if VIF's are over the value of 10, redundant variables can be removed or collapsed into one scale. For this reason, redundant variables were reduced into one scale for transformational and transactional leadership styles further indicating multicollinearity did not exist with VIF factors of 1.16 for transformational leadership style and 1.16 for transactional leadership style (see Table 3).

### ***Outliers, Normality, Linearity, Homoscedasticity, and Independence of Residuals***

I evaluated outliers, normality, homoscedasticity, and independence of residuals by examining the Shapiro-Wilkes test for normality which determined all variables to be non-significant. Further, I used the normal probability plot (P-P) of the regression standardized residual (see Figure 2), which indicated that the collected data visually were not exactly normally distributed. The examination indicated there were violations of these assumptions. The tendency of the points should lie in a reasonably straight line, diagonal from the bottom, left to the top right, which provides supportive evidence the assumption of normality has not been grossly violated (Jeong & Jung, 2016). Therefore, the research data did not meet the assumption of normality because residuals did not follow a perfect linear distribution (see Figure 2). The two outliers (records 80 and 97) noted did not affect the results of the study.

I created a partial regression scatterplot to test the linearity level between independent and dependent variables (see figure 3). According to the scatterplot I created, a linear relationship existed between the independent variables and the dependent variable. Further, I used the Durbin-Watson test. Durbin Watson test allows researchers to assess that the residuals are not linearly autocorrelated (Saunders, 2016). In this study, the Durbin-Watson test confirmed that the successive error differences were minor and within the acceptable range. The range was 2.53. Therefore, the data met the assumption of linearity.

Homoscedasticity occurs when the variables' variance in the score is equal (Saunders, 2016). I assessed for homoscedasticity using the scatterplot of residuals, and

the assumption was violated, as in Figure 3. To test for heteroscedasticity, I plotted the residuals against each predictor value, (IA, IB, IM, IS, IC, CR, MBEA, and MBEP), and no violation against the null hypothesis was found.

**Table 2**

*Variance Inflation Factors*

Variable	Collinearity Tolerance	VIF
Idealized Attributes	.072	13.925
Idealized Behaviors	.075	13.412
Inspirational Motivation	.104	9.593
Intellectual Stimulation	.068	14.687
Individual Consideration	.048	20.639
Contingent Reward	.191	5.244
Management by Exception Active	.710	1.408
Management by Exception Passive	.560	1.784

*Note.* N=110

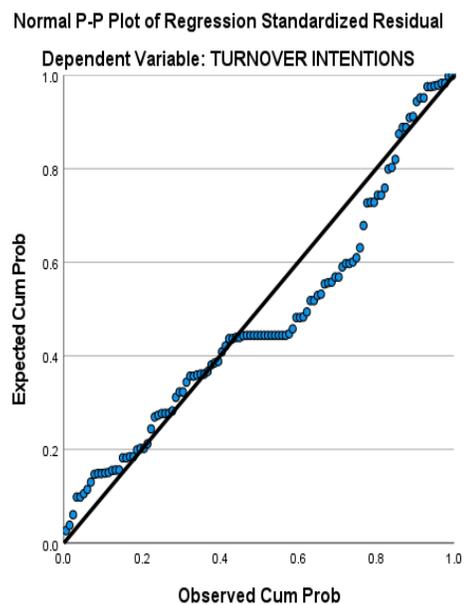
**Table 3**

*Variance Inflation Factors Reduced*

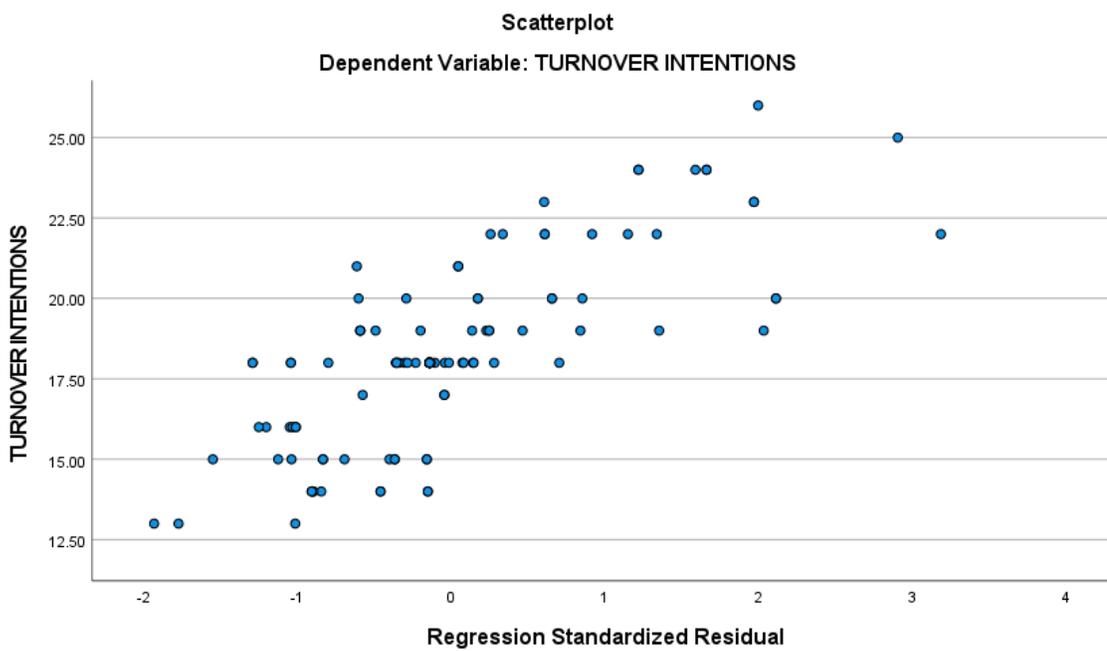
Variable	Collinearity Tolerance	Statistics VIF
Transformational	.859	1.164
Transactional	.859	1.164

**Figure 2**

*Normal Probability Plot (P-P) of the Regression Standardized Residuals*

**Figure 3**

*Scatterplot of Standardized Residuals*



## Descriptive Statistics

The survey's availability started on May 1, 2022, and concluded on May 31, 2022, after sending three follow-up emails to participants. The data collection process included using SurveyMonkey to create the survey, and participants could access the survey by QR code or web link. The surveys were distributed to five LTC facilities in Illinois. Out of 196 potential candidates to participate, I received 117 surveys for a response rate of 59%. Seven submissions were not valid, resulting in 110 records for analysis. Table 4 shows the descriptive statistics of the independent and dependent variables.

**Table 4**

*Means and Standard Deviations for Predictor and Criterion Variables*

Variable	<i>N</i>	<i>M</i>	<i>SD</i>
Turnover Intentions	110	18.30	2.88
Idealized Attributes	110	11.71	3.61
Idealized Behaviors	110	11.19	3.77
Inspirational Motivation	110	11.54	3.77
Intellectual Stimulation	110	10.92	4.04
Individual Consideration	110	10.76	4.15
Contingent Reward	110	11.72	3.72
Management by Exception Active	110	12.30	3.25
Management by Exception Passive	110	11.35	3.85

## Inferential Results

I used multiple linear regression,  $\alpha = .05$  (two-tailed), to examine the relationship between the subcategories of transformational and transactional leadership styles in predicting RN turnover intentions in LTC facilities. The independent variables were the subcategories, IA, IB, IM, IS, IC, CR, MBEA, and MBEP of transactional and transformational leadership. The dependent variable was RN turnover intention. The null hypothesis was there is no statistically significant relationship between idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management by exception-active, management by exception-passive, and RN turnover intentions in the LTC industry. The alternative hypothesis was there is a statistically significant relationship between idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management by exception-active, management by exception-passive, and RN turnover intentions in the LTC industry.

I conducted a preliminary analysis to assess whether the assumptions of multicollinearity, outliers, normality, linearity, and independence of residuals were met, but some violations were noted. The model was able to significantly predict turnover intentions  $F(8,101) = 8.53, p < .001, R^2 = .40, R^2_{adj} = .36$ .  $R^2_{adj}$  (.36) value indicated that approximately 36% (see Table 5) of variations in turnover were accounted for by the linear combination of the predictor variables. However, a review of the beta weights with a 95% confidence interval [LL,UL] in Table 6 specifies that only three variables, IM ( $t = -1.87, p < .010, \beta = -.323, CI [-.575, -.070]$ ), CR ( $t = 2.15, p < .015, \beta = .289, CI [.073, .478]$ ),

and MBEP ( $t=5.29$ ,  $p<.001$ ,  $\beta=.387$ , CI [.239,.534]) significantly contributed to the model.

**Table 5**

*Regression Analysis Summary for Predictor Variables*

Model	R	R Square	Adjust R Square	Std. Error of the Estimates	R Square Change	F Change	df1	df2	Sig. F Change
1	.641 <sup>a</sup>	.411	.364	2.30055	.411	8.799	8	101	<.001

**Table 6**

*Model Summary*

Model	B	Bias	Std. Error	Sig (2-tailed)	Wild Bootstrap <sup>a</sup> BCa 95% Confidence Interval	
					Lower	Upper
1(Constant)	2.116	-.009	.500	<.001	1.155	3.048
IA	.103	.008	.157	.537	-.416	.229
IB	.062	-.024	.165	.709	-.225	.311
IM	-.323	.005	.123	.009	-.575	-.070
IC	.031	.002	.189	.870	-.324	.386
IS	.005	-.007	.148	.972	-.264	.274
CR	.289	-.008	.116	.012	.073	.478
MBEA	-.010	.021	.099	.930	-.208	.256
MBEP	.387	-.001	.078	<.001	.239	.534

*Analysis Summary*

The purpose of this quantitative correlational study was to examine the relationship between transactional and transformational leadership styles and RN turnover intentions in LTC facilities. I used multiple linear regression to examine the ability of subcategories (IA, IB, IM, IS, IC, CR, MBEA, and MBEP) of transactional and

transformational leadership styles to predict RN turnover intentions. I assessed assumptions surrounding multiple regression with violations noted as evidence in Table 7. Shapiro-Wilk tests of normality (see Table 7) revealed all the variables to be non-significant. Based on the results from Table 7, the level of significance was less than .05 for transformational, transactional leadership style, and RN turnover intentions. Therefore, there was not a normal distribution for each of those variables. Acceptable skewness values for normality are -.05 and .5, and 0 to 3 for kurtosis (Jeong & Jung, 2016). All the skewness and kurtosis values were within the acceptable range of normality (-3 to 3) This indicated satisfaction of the normality assumption for the study variables (see Table 8).

**Table 7**  
*Test of Normality*

	Statistic	Shapiro-Wilk	
		<i>df</i>	Sig
Idealized Attributes	.952	110	<.001
Idealized Behaviors	.961	110	.003
Inspirational Motivation	.960	110	.002
Intellectual Stimulation	.964	110	.004
Individual Consideration	.953	110	<.001
Contingent Reward	.972	110	.019
Management by Exception Active	.971	110	.016
Management by Exception Passive	.954	110	<.001
Turnover Intentions	.951	110	<.001

**Table 8**  
*Skewness and Kurtosis Descriptive*

	Skewness	Kurtosis
Turnover Intentions	.338	-.154
Idealized Attributes	.441	-.422
Idealized Behaviors	.245	-.706
Inspirational Motivation	.401	-.389
Intellectual Stimulation	.180	-.677
Individual Consideration	.220	-.762
Contingent Reward	.019	-.472
Management by Exception Active	.115	.230
Management by Exception Passive	-.102	-.150

*Note.*  $N = 110$ .

Testing the significance of the correlations between IA, IB, IM, IS, IC, CR, MBEA, and MBEP entailed using wild bootstrapping procedures because the data did not follow a normal distribution, therefore, it did not meet the assumptions of normality. Given that, effects were computed for each 2,000 bootstrapped samples, and 95% confidence interval was computed by determining the 2.5<sup>th</sup> and 97.5<sup>th</sup> percentiles to reduce the likelihood of wrong statistical conclusions. Due to the existence of heteroscedasticity, wild bootstrapping (See Table 6) was necessary. The purpose of the use of wild bootstrapping is to stabilize the variance of the regression where heteroscedasticity and outliers exist at the same time (Rana et al., 2012).

The IA bootstrapped 95% CI [-.416, .229]. The IB bootstrapped 95% CI [-.225, .311]. The IM bootstrapped 95% CI [-.575, -.070]. The IS bootstrapped 95% CI [-.324, .386]. The IC bootstrapped 95% CI [-.264, .274]. The CR bootstrapped 95% CI [.073, .478]. The MBEA bootstrapped 95% CI [-.208, .256]. Lastly, the MBEP bootstrapped 95% CI [.239, .534]. The bootstrapped 95% confidence intervals for IA, IB, IS, IC, and MBEA are not statistically significant and therefore, I have failed to reject null hypothesis. The null hypothesis was there is no statistically significant relationship between idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management by exception-active, management by exception-passive, and RN turnover intentions in the LTC industry. The only statistically significant predictor variables were IM, CR, and MBEP.

With the model,  $F(8,101) = 8.53$ ,  $p < .001$ ,  $R^2 = .40$ ,  $R^2_{adj} = .36$ . The  $R^2_{adj} = .36$  indicates that approximately 36% of variations in RN turnover intentions is accounted for by the linear combination of the independent variables. The adjusted  $R^2$  statistic was used to take into account the number of independent variables used in the regression model (Saunders, 2016). Using the adjust  $R^2$  also helps to avoid overestimating the impact that an independent variable adds on the amount of variability that is explained by the estimated regression equation (2016). A review of the beta weights with a 95% confidence interval [LL,UL] (see Table 6) specifies that only three variables, IM ( $t=-1.87$ ,  $p=<.010$ ,  $\beta=-.323$ , CI [-.575,-.070]), CR ( $t=2.15$ ,  $p=<.015$ ,  $\beta=.289$ , CI [.073,.478]), and MBEP ( $t=5.29$ ,  $p=<.001$ ,  $\beta=.387$ , CI [.239,.534]) statistically significant to RN turnover intentions. These effects were tested using a wild bootstrap estimation approach with

2000 samples. Inspirational motivation, contingent reward, and management by exception-passive provided useful predicative information about RN turnover intention. The conclusion from this analysis is that the subcategory of transformational leadership, inspirational motivation is significantly associated with RN turnover intention. There is a negative statistically significant correlation between inspirational motivation and RN turnover intentions. As leaders have a more appealing vision that inspires and motivates employees, turnover intentions may decrease. Additionally, the subcategory of transactional leadership, contingent reward, and management by exception passive are significantly associated with RN turnover intentions. There is a positive significant correlation between contingent rewards, management by exception passive, and RN turnover intentions. As leaders have leadership styles lack gratitude for job success and performance, turnover intentions may increase.

The findings from the current study supported House's (1971) path-goal theory. House argued that path-goal theory is flexible and has the ability for leaders to explore leadership styles (House, 1996). House (1996) identified four leadership styles that help to improve organizational commitment. The four leadership styles are directive, supportive, achievement-oriented, and participative leadership. For example, Maaitah (2018) stated leadership behaviors that support motivation and empowerment for work units can influence employee behavior and improve organizational performance. Additionally, Al-Sada et al. (2017) reported that a component of path-goal theory, supportive leadership, concluded results that positively correlated with employee turnover intentions, reducing turnover rates. Furthermore, Kumar and Krishnaraj (2018)

deduced that leadership styles influence how motivated employees provide an increase in quality of care. Therefore, motivated employees decrease turnover intentions and increase quality of patient care.

My findings are supported by Park and Pierce (2020) and Sun and Wang (2016) who found a statistically significant negative correlation between the subcategory of transformational leadership style, inspirational motivation, and turnover intentions. Similar to Park and Pierce my study reported that when a leader strives to create vision and motivate employees, turnover intentions decreased.

### **Application to Professional Practice**

The purpose of this quantitative correlational study was to examine the relationship between the subcategories of transactional, transformational leadership styles and RN turnover intentions in LTC facilities. The dependent variable was RN turnover intentions. The findings of this study failed to reject the null hypothesis because there was not a statistically significant relationship between transformational, transactional leadership style, and RN turnover intentions. However, there was a negative statistically significant relationship between the subcategory of transformational leadership style, IM, and RN turnover intentions. Additionally, there was a statistically significant relationship between the subcategories of transactional leadership, contingent reward, management by exception active, and RN turnover intentions. The findings from this study can help nursing home administrators and nurse managers understand that a transformational or transactional leadership style increases RN motivation, job commitment, and job satisfaction, which overall may help RN turnover intentions. Furthermore, understanding

what reduces RN turnover will help nursing home leadership to understand what contributes to the improvement of the overall culture of the workplace, limit the financial burden it costs to replace an RN, and increase patient safety.

The findings of this study are relevant to improving business practice for nursing home administrators and RN managers to understand the benefits leadership styles can have on an RN turnover intention. Magbity et al. (2020) stated that voluntary employee turnover is a management problem that impacts healthcare organizations' strategic sustainability goals. Nursing home administrators and RN managers can positively or negatively impact nurse, patient, and organizational outcomes through leadership practices (Labrague, 2020).

### **Implications for Social Change**

The results from this study can provide opportunities for social change. Understanding the relationship between leadership styles and how it impacts turnover intentions in RNs can help nursing home administrators and RN managers to implement policy, procedures, and training to improve retention. Butler (2017) stated that leaders could increase workplace satisfaction and decrease turnover with improved training programs to help engage employees and their leaders. It is imperative for nursing home administrators to have the knowledge and proper training of the leadership styles. This knowledge may increase morale in employees, increase job satisfaction, and reduce RN turnover intentions. Furthermore, a combination of these factors in employees will increase the delivery of safe patient care and ultimately reduce the number of unemployed RNs in the community.

### **Recommendations for Action**

The results from this study indicated that there is a statistically significant negative relationship between transformational leadership style subcategory inspirational motivation and RN turnover intentions. A statistically significant negative relationship means that when one variable increases, the other variable decreases or vice versus (Saunders et al., 2016). Additionally, there is a statistically significant positive relationship between the transactional leadership style contingent reward, management by exception passive, and RN turnover intentions. Based on these findings, I recommend nursing home facilities have a system in place to measure RN turnover intentions. The goal of this study was not to examine the phenomenon of turnover in RNs in their workplace, but the findings do suggest that as a leader has transformational characteristics, turnover intentions in RNs decline.

The publication of this study will add to the body of knowledge, and researchers could use the knowledge in future studies concerning leadership styles and RN turnover intentions. I intend to present the findings of the study to the LTC facilities that participated. I would recommend the use of a tool such as the MLQ-5x and TIS-6 as these measurement tools have been determined to be valid and reliable. However, it might be more valuable of a leader's time to reach out to a consulting firm with the knowledge of measuring turnover and leadership styles. All facilities that participated in this study will receive a summarized version of the results, and I intend to publish this study in the ProQuest dissertation database.

### **Recommendations for Further Research**

In this study, I examined the relationship between path-goal theory (transformational and transactional leadership style) and turnover intentions in RNs in LTC facilities. Limitations can affect the study's outcome (Theofanidis & Fountouki, 2019). One of the limitations of this study was the geographic location was limited to Illinois. Geographic location could potentially change the study results based on specific cultures; I recommend having a larger geographic location. Secondly, I recommend using demographic data to determine if there is any specific difference in turnover between age, gender, and longevity on the job. Third, I recommend measuring turnover aspects related to job satisfaction and morale. This study was conducted during COVID-19 when times in the workplace were high stress; therefore, turnover intentions could be a result of job satisfaction and burnout. I recommend understanding why turnover intentions are present by conducting a qualitative study or mixed method. Using a qualitative study in future research may allow researchers to better understand the various strategies organizations use to retain their employees.

### **Reflections**

I began this journey to understand the relationship between leadership styles and turnover intentions in RNs. About 10 years ago, I was working as an executive assistant to an administrator in a nursing home facility and noticed turnover intentions in RNs were high, and I could not identify why. Pay and benefits offered to RNs were above the national average. This realization made me wonder if leadership styles, job satisfaction, morale, burnout, and the culture of the facility were factors of high turnover intentions.

Although I no longer work in the nursing home industry, my journey gave me new insight to help be the change needed to increase the learning of leadership styles to improve turnover intentions not only in nursing home facilities but in other industries as well. This journey has certainly been a whirlwind of an experience, from highs and lows during the research process to the challenge of work-life-school balance. My biggest challenge was the review process of my work and keeping an open mind to the suggestions offered. The second challenge was switching over from APA version 6 to APA version 7; I believe that I have become confident in my ability to write in the proper APA format, and the conversion was another unforeseen obstacle.

I conducted this study in a geographic location that was close to home to save time and money. My original intentions were to go into nursing home facilities, discuss my study with potential participants and hand the survey out. However, COVID-19 changed my plans for me, and I had to replan my distribution process and how to conduct the survey. At this point, I went to a web-based survey. I am surprised by how slow this process was. It took a month to get the number of participants I needed, and again delayed my process. My research has made me a stronger and more confident researcher; I gained extra patience from this experience and professional growth. The timeframe it took to complete this program is not what I originally planned. I thought I would be done in the minimum amount of time, but unexpected roadblocks and life experiences delayed the process. I am thankful for the mentors I have gained in this process to help me finish my goal and help me develop educationally and professionally.

## Conclusions

Employee voluntary turnover is a management problem that impacts healthcare organizations' strategic sustainability goals (Magbity et al., 2020). Pre-COVID-19, the Bureau of Labor Statistics (2019) estimated that by the year 2024, the RN shortage would be approximately 600,000. The purpose of this quantitative correlational study was to examine the relationship between leadership styles and RN turnover intentions in LTC facilities. The predictor variables are subcategories of transactional leadership and transformational leadership styles. The criterion variable was RN turnover intentions. The population for this study included RNs working in LTC facilities in Illinois. The findings and knowledge from this study may contribute to strategy formulation and implementation of strategies by organizational leaders to promote positive social change that could reduce employee turnover intentions and the number of unemployed RNs in the community. I used SPSS version 28 to test the hypothesis by analyzing descriptive statistics, testing the assumptions (normality, multicollinearity, homoscedasticity, and independence of error), and multiple regression analysis. The findings revealed that the transformational leadership subcategory, inspirational motivation, had a negative statistically significant relationship with turnover intentions in RNs and transactional leadership subcategories, contingent reward, and management by exception passive, had a positive statistically significant relationship with turnover intentions in RNs.

The results of this study support House's (1971) path-goal theory, specific characteristics of transformational leadership style. House's path-goal theory distinguishes between leadership styles and the influence of leadership styles on

employee performance and engagement. Rana et al. (2019) described the path-goal theory as a function of a leader, the characteristics of the follower, and the circumstances the leader and follower are operating within. The path-goal theory supports daily relationships between supervisors and their subordinates (House, 1996). Nursing home administrators and nurse managers can use strategies to employ specific skill sets that mirror characteristics of path-goal theory to improve RN turnover intentions.

## References

- Adams, A., Hollingsworth, A., & Osman, A. (2019). The Implementation of a cultural change Toolkit to reduce nursing burnout and mitigate nurse turnover in the emergency department. *Journal of Emergency Nursing, 45*(4), 452–456.  
<https://doi:10.1016/j.jen.2019.03.004>
- Adashi, E. Y., Walters, L. B., & Menikoff, J. A. (2018). The Belmont report at 40: Reckoning with time. *American Journal of Public Health, 108*(10), 1345–1348.  
<https://doi:10.2105/AJPH.2018.304580>
- Akbiyik, A., Korhan, E. A., Kiray, S., & Kirsan, M. (2020). The effect of nurses' leadership behavior on the quality of nursing care and patient outcomes. *Creative Nursing, 26*(1), e8-e18. <https://doi.org/10.1891/1078-4535.26.1.e8>
- Akgunduz, Y., & Eryılmaz, G. (2018). Does turnover intention mediate the effects of job insecurity and co-worker support on social loafing? *International Journal of Hospitality Management, 68*, 41-49. <https://doi:10.1016/j.ijhm.2017.09.010>
- Alatawi, M. A. (2017). The myth of the additive effect of the transformational leadership model. *Contemporary Management Research, 13*(1), 19–30.  
<https://doi:10.7903/cmr.16269>
- Alfanny, J. (2018). Analysis of leadership styles on style performance (case study employee of directorate of infrastructure investment development, ministry of public works and housing). *Jurnal Sosial Humaniora, 11*(1), 19.  
<https://doi:10.12962/j24433527.v11i1.3695>

- Al-Hamdan, Z., Manojlovich, M., & Tanima, B. (2016). Jordanian nursing work environments, intent to stay, and job satisfaction. *Journal of Nursing Scholarship*, 49(1), 103–110. <https://doi:10.1111/jnu.12265>
- Alhamwan, M., & Mat, N. (2015). Antecedents of turnover intention behavior among nurses: A theoretical review. *Journal of Management and Sustainability*, 5(1). <https://doi:10.5539/jms.v5n1p84>
- Al Mamun, C. A. (2017). Factors affecting employee turnover and sound retention strategies in the business organization: A conceptual view. *Problems and Perspectives in Management*, 15(1), 63-71. [https://doi:10.21511/ppm15\(1\).2017.06](https://doi:10.21511/ppm15(1).2017.06)
- Alonderiene, R., & Majauskaite, M. (2016). Leadership style and job satisfaction in higher education institutions. *International Journal of Educational Management*, 30(1), 140–164. <https://doi:10.1108/ijem-08-2014-0106>
- Al Sabei, S. D., Labrague, L. J., Miner Ross, A., Karkada, S., Albashayreh, A., Al Masroori, F., & Al Hashmi, N. (2020). Nursing work environment, turnover intention, job burnout, and quality of care: The moderating role of job satisfaction. *Journal of Nursing Scholarship*, 52(1), 95–104. <https://doi:10.1111/jnu.12528>
- Al-Sada, M., Al-Esmael, B., & Faisal, N. (2017). Influence of organizational culture and leadership style on employee satisfaction, commitment and motivation in the educational sector in Qatar. *EuroMed Journal of Business*, 12(2), 163-188. <https://10.1108/EMJB-02-2016-003>

- Alshmemri, M., Lina, S. A., & Phillip, M. (2017). Herzberg's two-factor theory. *Life Science Journal* 14, 12-16. <https://doi:10.7537/marslsj140517.03>
- Alrawahi, S., Sellgren, S.F., Altouby, S., Alwahaibi, N. & Brommels, M. (2020). The application of Herzberg's two-factor theory of motivation to job satisfaction in clinical laboratories in Omani hospitals. *Heliyon*, 6(9).  
<https://doi:10.1016/j.heliyon.2020.e04829>
- Al Zamel, L. G., Lim Abdullah, K., Chan, C. M., & Piaw, C. Y. (2020). Factors influencing nurses' intention to leave and intention to stay: An integrative review. *Home Health Care Management & Practice*, 32(4), 218–228.  
<https://doi:10.1177/1084822320931363>
- Amina, A., Ul Hadi, N., Waheed, A., & Fayyaz, H. (2021). The effect of leader mindfulness on employee job performance: Investigating the mediating and moderating role of leader-member exchange and organization culture. *Journal of Behavioural Sciences*, 31(2), 137–163.
- Aniley, A. W., Taye, B., & Girma, B. (2020). Magnitude of Turnover Intention and Associated Factors Among Nurses Working in Emergency Departments of Governmental Hospitals in Addis Ababa, Ethiopia: A cross sectional institutional based study. <https://doi:10.21203/rs.2.21566/v1>
- Antonakis, J., Avolio, B. J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. *The Leadership Quarterly*, 14(3), 261-295.  
[https://doi:10.1016/S1048-9843\(03\)00030-4](https://doi:10.1016/S1048-9843(03)00030-4)

- Antonakis, J., House, R. J., & Simonton, D. K. (2017). Can super smart leaders suffer from too much of a good thing? The curvilinear effect of intelligence on perceived leadership behavior. *JOURNAL OF APPLIED PSYCHOLOGY*, *102*(7), 1003–1021. <https://doi:10.1037/apl0000221>
- Ariyabuddhiphongs, V., & Kahn, S. I. (2017). Transformational leadership and turnover intention: The mediating effects of trust and job performance on café employees in Thailand. *Journal of Human Resources in Hospitality & Tourism*, *16*(2), 215–233. <https://doi:10.1080/15332845.2016.1202730>
- Ashraf, M. A. (2020). Demographic factors, compensation, job satisfaction and organizational commitment in private university: an analysis using SEM. *Journal of Global Responsibility*, *11*(4), 407–436. <https://doi:10.1108/JGR-01-2020-0010>
- Azaare, J., & Gross, J. (2011). The nature of leadership style in nursing management. *British Journal of Nursing*, *20*(11), 672–680. <https://doi:10.12968/bjon.2011.20.11.672>
- Bass, B., & Avolio, B. (2004). Multifactor leadership questionnaire: Manual and sampler set (3rd ed.) Mind Garden.
- Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, *88*(2), 207–218. <https://doi:10.1037/0021-9010.88.2.207>
- Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, *18*, 19-31. [https://doi:10.1016/00902616\(90\)90061-s](https://doi:10.1016/00902616(90)90061-s)

- Batista-Foguet, J. M., Esteve, M., & van Witteloostuijn, A. (2021). Measuring leadership an assessment of the Multifactor Leadership Questionnaire. *PLoS ONE*, *16*(7), 1–22. <https://doi:10.1371/journal.pone.0254329>
- Bloomfield, J., & Fisher, M. J. (2019). Quantitative research design. *Jarna*, *22*(2), 27-30. <https://doi.org/10.33235/jarna.22.2.27-30>
- Blumberg, B. F., Cooper, D. R., & Schindler, P. S. (2014). *Business Research Methods*. McGraw-Hill education.
- Boamah, S. A., & Tremblay, P. (2018). Examining the factor structure of the MLQ transactional and transformational leadership dimensions in nursing context. *Western Journal of Nursing Research*, *41*(5), 743–761. <https://doi:10.1177/0193945918778833>
- Bosler, M., & Broszeit, S. (2017). Do minimum wages increase job satisfaction? Micro-data evidence from the new German minimum wage. *Labour*, *31*(4), 480-493. <https://doi:10.1111/labr.12117>
- Bothma, C. F. C., & Roodt, G. (2013). The validation of the turnover intention scale. *SA Journal of Human Resource Management*, *11*(1). <https://doi:10.4102/sajhrm.v11i1.507>
- Bureau of Labor Statistics. (2020). Occupational employment and wages, April 2020. <https://www.bls.gov/ooh/healthcare/registered-nurses.htm#tab-6>
- Bureau of Labor Statistics. (2019). Occupational employment and wages, April 2019. <https://www.bls.gov/ooh/healthcare/registered-nurses.htm#tab-6>
- Burns, J. M. (1978). *Leadership*. New York, NY: Harper and Row.

- Butler, S. S. (2017). Exploring relationships among occupational safety, job turnover, and age among home care aides in Maine. *New Solutions: A Journal of Environmental and Occupational Health Policy*, 27(4), 501-523.  
<https://doi:10.1177/1048291117739418>
- Caillier, J. G. (2016). Linking transformational leadership to self-efficacy, extra-role behaviors, and turnover intentions in public agencies: The mediating role of goal clarity. *Administration & Society*, 48(7), 883–906.  
<https://doi:10.1177/0095399713519093>
- Clack, L. (2021) Employee engagement: Keys to organizational success. In: Dhiman S.K. (eds) *The Palgrave Handbook of Workplace Well-Being*. Palgrave Macmillan, Cham. [https://doi.org/10.1007/978-3-030-30025-8\\_77](https://doi.org/10.1007/978-3-030-30025-8_77)
- Clipa, O., & Greciuc (Serban), M.A. (2018). Relations of style of leadership and achievement motivation for teacher. *Revista Romaneasca pentru Educatie Multidimensională*, 10(4), 55-64. <https://doi.org/10.18662/rrem/72>
- Connelly, L. M. (2021). Introduction to analysis of variance (ANOVA). *MEDSURG Nursing*, 30(3), 218–158.
- Coomber, B., & Barriball, L. (2007). Impact of job satisfaction components on intent to leave and turn over hospital-based nurses: A review of the research literature. *International Journal of Nursing Studies*, 44(2), 2970314.
- Cor, M. K. (2016). Trust me, it is valid: Research validity in pharmacy education research. *Currents in Pharmacy Teaching and Learning*, 8(3), 391-400.  
<https://doi:10.1016/j.cptl.2016.02.014>

- Danis, K., Fonteneau, L., Georges, S., Daniau, C., Bernard-Stoecklin, S., Domegan, L., O'Donnell, J., Hauge, S. H., Dequeker, S., Vandael, E., Van der Heyden, J., Renard, F., Sierra, N. B., Ricchizzi, E., Schweickert, B., Schmidt, N., Abu Sin, M., Eckmanns, T., Paiva, J.-A., & Schneider, E. (2020). High impact of COVID-19 in long-term care facilities, suggestion for monitoring in the EU/EEA, *Euro Surveillance : Bulletin Europeen Sur Les Maladies Transmissibles = European Communicable Disease Bulletin*, 25(22). <https://doi:10.2807/1560-7917.ES.2020.25.22.2000956>
- Dimitrov, D. Y., & Darova, S. (2016). Factor structure of the multifactor leadership questionnaire MLQ 5x. *Strategic Impact*, 1. 44-55.
- Dixon, M. L., & Hart, L. K. (2010). The impact of path-goal leadership styles on work group effectiveness and turnover intentions. *Journal of Managerial Issues*, 22(1). 52-69. <https://jstor.org/stable/25822515?seq=1>
- Duan, J., Li, C., Xu, Y., & Wu, C. (2016). Transformational leadership and employee voice behavior: A Pygmalion mechanism. *Journal of Organizational Behavior*, 38(5), 650–670. <https://doi:10.1002/job.2157>
- DuBrin, A. J. (2014). *Leadership. Research Findings, Practice, and Skills*. Mason, OH:South-Western.
- Edwards-Dandridge, Y., Simmons, B. D., & Campbell, D. G. (2020). Predictor of turnover intention of register nurses: Job satisfaction or work engagement? ScholarWorks. <https://doi:10.5590/IJAMT.2020.19.1.07>
- El-Masri, M. M. (2017). Non-probability sampling. *The Canadian Nurse*, 113, 17.

- Erceg, A., & Suljug, A. (2016). How corporations motivate their employees - Hrvatski Telekom example. *Pravni Vjesnik*, 32(2), 85-102.  
<https://hrcak.srce.hr/ojs/index.php/pravni-vjesnik/index>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. doi:10.11648/j.ajtas.20160501.11
- Evans, M. G. (1974). Extensions of a path-goal theory of motivation. *Journal of Applied Psychology*, 59(2), 172–178. <https://doi:10.1037/h0036516>
- Ewen, R. B., Smith, P. C., & Hulin, C. L. (1966). An empirical test of the herzberg two-factor theory. *Journal of Applied Psychology*, 50(6), 544–550.  
<https://doi:10.1037/h0024042>
- Fein, E. C., & Kulik, C. T. (2011). Safeguarding access and safeguarding meaning as strategies for achieving confidentiality. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 4(4), 479-481.  
<https://doi:10.1111/j.1754-9434.2011.01378>.
- Fernandes, A. A. R. (2018). The effect of organization culture and technology on motivation, knowledge asset and knowledge management. *International Journal of Law and Management*, 6(5), 1087–1096. <https://doi:10.1108/ijlma-05-2017-0105>
- Fernandes, A. A. R., & Fresly, J. (2017). Modeling of role of public leader, open government information and public service performance in Indonesia. *Journal of*

*Management Development*, 36(9), 1160–1169. <https://doi:10.1108/jmd-12-2016-0322>

Fisher, M., & Royster, D. (2016). Mathematics teachers' support and retention: using Maslow's hierarchy to understand teacher's needs.

Ferreira, V.B., Amestoy, S.C., Reis da Silva, G.T., Trindade, L.L., Reis dos Santos, I.A., & Galhardo Varanda, P.A. (2020). Transformational leadership in nursing practice: challenges and strategies. *Revista Brasileira de Enfermagem*, 73, 1–7. <https://doi:10.1590/0034-7167-2019-0364>

Garza, J. A., & Taliaferro, D. (2021). Job satisfaction among home healthcare nurses. *Home Healthcare Now*, 39(1), 20–24. <https://doi:10.1097/nhh.0000000000000921>

Gerring, J. (2010). How good is good enough? A multidimensional, best-possible standard for research design. *Political Research Quarterly*, 64(4), 625–636. <https://doi:10.1177/1065912910361221>

Gizaw, A.B., Lema, T.B., Debacho, W.W. & Germossa, G.N. (2017). Intentions to stay in nursing profession and its predictors among nurses working in Jimma Zone public hospitals, South West Ethiopia. *Journal of Nursing & Care* 07(1), 1-8. <https://doi:10.4172/2167-1168.1000440>

Goh, A. M. J., Ang, S. Y., & Della, P. R. (2018). Leadership style of nurse managers as perceived by registered nurses: A cross-sectional survey. *Proceedings of Singapore Healthcare*, 27(3), 205–210. doi: <https://10.1177/2010105817751742>

Green, S., & Salkind, N. (2016). Using SPSS for Windows and Macintosh: Analyzing and understanding data. Upper Saddle River, NJ: Prentice Hall.

- Greinacher, A., Helaß, M., Nikendei, C., Müller, A., Mulfinger, N., Gündel, H., & Maatouk, I. (2021). The impact of personality on intention to leave the nursing profession: A structural equation model. *Journal of Clinical Nursing*.  
<https://doi:10.1111/jocn.16010>
- Grissom, J. A., Viano, S. L., & Selin, J. L. (2015). Understanding employee turnover in the public sector: Insights from research on teacher mobility. *Public Administration Review*, 76(2), 241–251. <https://doi:10.1111/puar.12435>
- Günzel-Jensen, F., Jain, A. K., & Kjeldsen, A. M. (2018). Distributed leadership in health care: The role of formal leadership styles and organizational efficacy. *Leadership*, 14(1), 110–133. <https://doi:10.1177/1742715016646441>
- Gyensare, M. A., Anku-Tsedde, O., Sanda, M.-A., & Okpoti, C. A. (2016). Transformational leadership and employee turnover intention. *World Journal of Entrepreneurship, Management and Sustainable Development*, 12(3), 243–266.  
<https://doi:10.1108/wjemsd-02-2016-0008>
- Haase, H., & Franco, M. (2020). Leadership and collective entrepreneurship: evidence from the health care sector. *Innovation: The European Journal of Social Science Research*, 33(3), 368–385. <https://doi:10.1080/13511610.2020.1756231>
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9(2), 193–206.  
<https://doi:10.5465/amr.1984.4277628>
- Handley, M. A., Lyles, C. R., McCulloch, C., & Cattamanchi, A. (2018). Selecting and Improving Quasi-Experimental Designs in Effectiveness and Implementation

Research. *Annual Review of Public Health*, 39(1), 5–25.

<https://doi:10.1146/annurev-publhealth-040617-014128>

Hauret, L., & Williams, D. R. (2019). Relative income and pay satisfaction: further evidence on the role of the reference group. *Journal of Happiness Studies*, 20(1), 307-329. <https://doi:10.1007/s10902-017-9950-2>

Herzberg, F. (1974). Motivation-hygiene profiles: Pinpointing what ails the organization. *Organizational Dynamics*, 3(2), 18-29. <http://www.psycnet.apa.org>

Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The motivation to work*. New Brunswick, NJ: Transaction.

Hoch, J. E., Bommer, W. H., Dulebohn, J. H., & Wu, D. (2018). Do ethical, authentic, and servant leadership explain variance above and beyond transformational leadership? A meta-analysis. *Journal of Management*, 44(2), 501.

House, R. J. (1971). A path-goal theory of leader effectiveness. *Administrative Science Quarterly*, 16, 321–339. <https://doi:10.2307/2391905>

House, R. J. (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory. *The leadership Quarterly*, 7, 323-352. [https://10.1016/S1048-9843\(96\)90023-5](https://10.1016/S1048-9843(96)90023-5)

Hur, Y. (2017). Testing Herzberg's two-factor theory of motivation in the public sector: Is it applicable to public managers? *Public Organization Review*, 18(3), 329–343. <https://doi:10.1007/s11115-017-0379-1>

Illinois Nursing Workforce Center (2020). Registered nurse (2020) key findings.

<https://www.nursing.illinois.gov/ResearchData.asp>

- Jacobs, E., & Roodt, G. (2007). The development of a knowledge sharing construct to predict turnover intentions. *Aslib Proceedings*, 59, 229-248.  
<https://doi:10.1108/00012530710752034>
- Jambawo, S. (2018). Transformational leadership and ethical leadership: their significance in the mental healthcare system. *British Journal of Nursing*, 27(17), 998–1001. <https://doi:10.12968/bjon.2018.27.17.998>
- Jeong, Y. & Jung, M. (2016). Application and interpretation of hierarchical multiple regression. *Orthopaedic Nursing* 35(5). 338-341.  
<https://doi:10.1097/NOR.0000000000000279>
- Kaewkungwal, J., Adams, P., Sattabongkot, J., Lie, R. K., & Wendler, D. (2019). Conducting human challenge studies in LMICs: A survey of researchers and ethics committee members in Thailand. *PLOS ONE*, 14(10), e0223619.  
<https://doi:10.1371/journal.pone.022361>
- Kaliyadan, F., & Kulkarni, V. (2019). Types of variables, descriptive statistics, and sample size. *Indian Dermatol Online*, 10, 82-86. [https://10.4103.idoj.idoj\\_468\\_18](https://10.4103.idoj.idoj_468_18)
- Kang, H. (2013). The prevention and handling of the missing data. *Korean Journal of Anesthesiology*, 64(5), 402–406. <https://doi:10.4097/kjae.2013.64.5.40>
- Kanste, O., Miettunen, J., & Kyngas, H. (2006). Psychometric properties of the multifactor leadership questionnaire among nurses. *Journal of Advanced Nursing*, 57(2), 201-212. <https://doi:10.1111/j.1365-2648.2006.04100.x>
- Khalid, N., Pahi, M., & Ahmed, U. (2016). Loosing your best talent: Can leadership retain employees? The dilemma of the banking sector of Hyderabad Sindh,

- Pakistan: A medication investigation. *International Review of Management and Marketing* 6(3), 608-616.
- King, N. (1970). Clarification and evaluation of the two-factor theory of job satisfaction. *Psychological Bulletin*, 74(18). <https://doi:10.1037/h0029444>
- Kleinman, C. (2004). Leadership: A key strategy in staff nurse retention. *The Journal of Continuing Education in Nursing*, 35(3), 128–132. <https://doi:10.3928/0022-0124-20040501-09>
- Kumar, G. S., & Krishnaraj, R. (2018). Influence of leadership styles on employees' commitment to service quality. *International Journal of Hospitality & Tourism Systems*, 11 (1), 38-46. <http://www.publishingindia.com/ijhts/>
- Kwak, S. G. & Kim, J.H. (2017). Central limit theorem: the cornerstone of modern statistics. *Korean Journal of Anesthesiology*, 70(2), 144–156. <https://doi:10.4097/kjae.2017.70.2.14>
- Labrague, L. J. (2020). Organisational and professional turnover intention among nurse managers: A cross-sectional study. *Journal of Nursing Management*. <https://doi:10.1111/jonm.13079>
- LaFollette, G. (2018). Learn about your customers with SurveyMonkey. *Journal of Accountancy*, 226.
- Landrum, N., & Daily, C. (2012). Corporate accountability: A path-goal perspective. *International Journal of Business Insights and transformation*, 4, 50-60. <https://www.ijbit.org/v4sp3.php>

- Lin, P.-Y., MacLennan, S., Hunt, N., & Cox, T. (2015). The influences of nursing transformational leadership style on the quality of nurses' working lives in Taiwan: a cross-sectional quantitative study. *BMC Nursing, 14*(1).  
<https://doi:10.1186/s12912-015-0082-x>
- Maaitah, A. M. (2018). The role of leadership style on turnover intention. *International Review of Management and Marketing, 8*(5), 24-29.
- MacPhee, M., Dahinten, V., & Havaei, F. (2017). The impact of heavy perceived nurse workloads on patient and nurse outcomes. *Administrative Sciences, 7*(1), 7.  
<https://doi:10.3390/admsci7010007>
- Madden, L., Mathias, B. D., & Madden, T. M. (2015). In good company. *Management Research Review, 38*, 242-363. <https://doi:10.1108/MRR-09-2013-0228>
- Magbity, J. B., Ofei, A. M. A., & Wilson, D. (2020). Leadership styles of nurse managers and turnover intention. *Hospital Topics, 98*(2), 45–50.  
<https://doi:10.1080/00185868.2020.1750324>
- Mahzan, N., & Abidin, A. Z. (2017). Examining navigators' job satisfaction in royal Malaysian air force through the lenses of Herzberg's motivation-hygiene theory. *Journal of Economics, Business, and Management, 3*(8), 195-199.  
<https://doi:10.7763/joebm.2015.v3.281>
- Majeed, N., & Jamshed, S. (2020). Nursing turnover intentions: The role of leader emotional intelligence and team culture. *Journal of Nursing Management*.  
<https://doi:10.1111/jonm.13144>

- Malik, S. Z., & Khalid, N. (2016). Psychological contract breach, work engagement and turnover intention: Evidence from banking industry in Pakistan. *Pakistan Economic and Social Review*, 54, 37-54.
- Malik, S. H. (2013). Relationship between leader behavior and employees' job satisfaction: A path-goal approach. *Pakistan Journal of Commerce & Social Sciences*, 7, 209-222. <https://www.jespk.net>
- Malone, H., Nicholl, H., & Tracey, C. (2014). Awareness and minimization of systematic bias in research. *British Journal of Nursing*, 23(5), 279–282.  
<https://doi:10.12968/bjon.2014.23.5.279>
- Manoppo, V. P. (2020). Transformational leadership as a factor that decreases turnover intention: a mediation of work stress and organizational citizenship behavior. *The TQM Journal*, 32(6), 1395–1412. <https://doi:10.1108/tqm-05-2020-0097>
- 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:10.12968/bjon.2021.30.5.302>
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396. <https://doi:10.1037/h0054346>
- Maslow, A. H. (1954). The theory of hierarchy of needs concept. New York, NY:McGraw.
- McKenna, J., & Jeske, D. (2020). Ethical leadership and decision authority effects on nurses' engagement, exhaustion, and turnover intention. *Journal of Advanced Nursing*. <https://doi:10.1111/jan.14591>

- Mind Garden. (2014). Multifactor Leadership Questionnaire (MLQ). Retrieved from <http://www.mindgarden.com/products/mlq.html>
- Mokoka, K. E., Ehlers, V. J., & Oosthuizen, M. J. (2011). Factors influencing the retention of registered nurses in the Gauteng Province of South Africa. *Curationis*, 34(1). <https://doi:10.4102/curationis.v34i1.16>
- Muddle, G. R. (2020). Relationship between leadership style and hospital employee engagement in Papua New Guinea. *Asia Pacific Journal of Health Management*, 15(4), 42–55. <https://doi:10.24083/apjhm.v15i4.441>
- 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:10.6007/ijarbss/v7-i12/3702>
- National Council of State Boards of Nursing. (2020). Nurse licensure compact. Retrieved from <https://www.ncsbn.org/nlc.htm/>
- Nelissen, J., Forrier, A., & Verbruggen, M. (2017). Employee development and voluntary turnover: Testing the employability paradox. *Human Resource Management Journal*, 27, 152-168.
- Nursing Solutions Inc. (2020). 2020 national healthcare retention & RN staffing report. [https://www.nsinursingsolutions.com/Documents/Library/NSI\\_National\\_Health\\_Care\\_Retention\\_Report.pdf](https://www.nsinursingsolutions.com/Documents/Library/NSI_National_Health_Care_Retention_Report.pdf)

Northouse, P. G. (2015). *Leadership: Theory and practice* (7th ed.). Thousand Oaks, CA: Sage Publications.

Nulty, D. D. (2008). The adequacy of response rates to online and paper surveys: what can be done? *Assessment & Evaluation in Higher Education*, 33(3), 301–314.

<https://doi:10.1080/02602930701293231>

Nursing AAcCo. Nursing Shortage Fact Sheet 2017 [updated 18/05/2017].

<http://www.aacn.nche.edu/media-relations/NrsgShortageFS.pdf>

O’Boyle, I., & Cummins, P. (2013). Examining theories of individual performance management. *Training & Management Development Methods*, 27(5), 369-377.

Özden, D., Arslan, G. G., Ertuğrul, B., & Karakaya, S. (2017). The effect of nurses’ ethical leadership and ethical climate perceptions on job satisfaction. *Nursing Ethics*, 26(4), 1211–1225. <https://doi:10.1177/0969733017736924>

Park, H. Y. (2021). The Association between fair hiring policy and employee job satisfaction: Theoretical approach in the literature analysis. *East Asian Journal of Business Economics (EAJBE)*, 9(2), 43–54.

<https://doi.org/10.20498/EAJBE.2021.9.2.43>

Park, T., & Pierce, B. (2020). Impacts of transformational leadership on turnover intention of child welfare workers. *Children and Youth Services Review*, 108, 104624. <https://doi:10.1016/j.childyouth.2019.104624>

- Parsons, E., & Broadbridge, A. (2006). Job motivation and satisfaction: Unpacking the key factors for charity shop managers. *Journal of Retailing and Consumer Services*, 13(2), 121–131. <https://doi:10.1016/j.jretconser.2005.08.013>
- Pishgooie, A., Atashzadeh-Shoorideh, F., Falco-Pegueroles, A., & Lotfi, Z. (2019). Correlation between nursing managers' leadership styles and nurses' job stress and anticipated turnover. *Journal of Nursing Management*, 27(3), 527-534. <https://doi:10.1111/jonm.12707>
- Poels, J., Verschueren, M., Milisen, K., & Vlaeyen, E. (2020). Leadership styles and leadership outcomes in nursing homes: a cross-sectional analysis. *MBC Health Services Research*, 20, 1-10. <https://doi.org/10.1186/s12913-020-05854-7>
- Poghosyan, L., Liu, J., & Norful, A. A. (2017). Nurse practitioners as primary care providers with their own patient panels and organizational structures: A cross-sectional study. *International Journal of Nursing Studies*, 74, 1-7. <https://doi:10.1016/j.ijnurstu.2017.05.004>
- Popli, S., & Rizvi, I. A. (2015). Exploring the relationship between service orientation, employee engagement and perceived leadership style: A study of managers in the private service sector organizations in India. *The Journal of Services Marketing*, 29(1), 59-70. <https://doi:10.1108/jsm-06-2013-0151>
- Pusa, S., Isaksson, U., & Sundin, K. (2021). Evaluation of the implementation process of a family systems nursing approach in home health care: A mixed-methods study. *Journal of Family Nursing*, 27(3), 235–249. <https://doi:10.1177/10748407211000050>

- Rahman, H., & Nurullah, S. M. (2014). Motivational need hierarchy of employees in public and private commercial banks. *Central European Business Review*, 3(2), 44–53. <https://doi:10.18267/j.cebr.84>
- Rana, R., K'Aol, G., & Kirubi, M. (2019). Influence of supportive and participative path-goal leadership styles and the moderating role of task structure on employee performance. *International Journal of Research in Business and Social Science* (2147- 4478), 8(5), 76–87. <https://doi:10.20525/ijrbs.v8i5.317>
- Robbins, B., & Davidhizer, R. (2020). Transformational leadership in health care today. *The Health Care Manager*, 39(3), 117–121. <https://doi:10.1097/01.HCM.0000284014.26397>.
- Roe, E., & Just, D. R. (2009). Internal and external validity in economics research: tradeoffs between experiments, field experiments, natural experiments, and field data. *American Journal of Agricultural Economics*, 91(5), 1266–1271. <https://doi:10.1111/j.1467-8276.2009.01295.x>
- Saari, L. M., & Scherbaum, C. A. (2011). Identified employee surveys: Potential promise, perils, and professional practice guidelines. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 4(4), 435-448.
- Sahu, S., Pathardikar, A., & Kumar, A. (2018). Transformational leadership and turnover. *Leadership & Organization Development Journal*, 39(1), 82–99. <https://doi:10.1108/lodj-12-2014-0243>
- Saunders, M. N. K., Lewis, P., & Thornhill, A. (2016). Research methods for business students (7th ed.). Essex, England: Pearson Education Limited.

- Seljemo, C., Viksveen, P., & Ree, E. (2020). The role of transformational leadership, job demands and job resources for patient safety culture in Norwegian nursing homes: a cross-sectional study. *BMC Health Services Research*, 20(1).  
<https://doi:10.1186/s12913-020-05671-y>
- 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). <https://doi:10.1186/s12912-020-00481-3>
- Sfantou, D. F., Laliotis, A., Patelarou, A. E., Sifaki-Pistolla, D., Matalliotakis, M., & Patelarou, E. (2017). Importance of leadership style towards quality of care measures in healthcare settings: A systematic review. *HEALTHCARE*, 5(4), UNSP 73. <https://doi:10.3390/healthcare5040073>
- Shila, J. M., & Sevilla, A. V. (2015). The impact of the principals' leadership style on teachers' job satisfaction and organizational commitment: An Indian perspective. *Indian Journal of Positive Psychology*, 6(1), 37-43. Retrieved from  
<http://www.iahrw.com/index.php/home/journals>
- Sieber, J. . (1992). Planning ethically responsible research: A guide for students and internal review boards. Newbury Park, CA: Sage.
- Simundic, A. (2013). Bias in research. *Biochemia Medica*, 23(1), 12-15.  
<https://doi:10.11613/BM.2013.003>
- Sökmen, A., Bitmis, G. M., & Üner, M. M. (2015). The mediating role of person-organization fit in the supportive leadership-outcome relationships. *E+M Ökonomie a Management*, 18(3), 62–72. <https://doi:10.15240/tul/001/2015-3-006>

- Sulamuthu, G. A., & Yusof, H. M. (2018). Leadership style and employee turnover intentions. *IEOM Society International*, 2298-2306.
- Sun, R., & Wang, W. (2016). Transformational leadership, employee turnover intention, and actual voluntary turnover in public organizations. *Public Management Review*, 19(8), 1124–1141. <https://doi:10.1080/14719037.2016.1257063>
- Takatsuki, D., Saiki, S., & Nakamura, M. (2018). Using virtual agent for facilitating online questionnaire surveys. 2018 International Conference on Signal Processing and Information Security (ICSPIS). <https://doi:10.1109/cspis.2018.8642712>
- Takawira, N., Coetzee, M., & Schreuder, D. (2014). Job embeddedness, work engagement and turnover intention of staff in a higher education institution: An exploratory study. *SA Journal of Human Resource Management*, 14(1). <https://doi:10.4102/sajhrm.v12i1.524>
- Tamura, R., Kobayashi, K., Takano, Y., Miyashiro, R., Nakata, K., & Matsui, T. (2019). Mixed integer quadratic optimization formulations for eliminating multicollinearity based on variance inflation factor. *Journal of Global Optimization*, 73(2), 431–446. <https://doi:10.1007/s10898-018-0713-3>
- Theofanidis, D., & Fountouki, A. (2019). Limitations and delimitations in the research process. *Perioperative Nursing* 7, 155-163. <https://doi:10.5281/zenodo.2552022>
- Toinic, P., Krajnc, M., Vivod, K., Lynn, M. L., & Freser, B. (2018). 'Students' behavioral intentions regarding the future use of quantitative research methods. *Our Economy (Nase Gospodarstvo)*, 64(2), 25-33. <https://doi:10.2478/ngoe-2018-0009>

- Trice, H., & Beyer, J. (1993). *The cultures of work organizations*. Englewood Cliffs: Prentice-Hall.
- Tuch, A. N., & Hornbaek, K. (2015). Does Herzberg's notion of hygienes and motivators apply to user experience? *ACM Transactions on Computer-Human Interaction (TOCHI)*, 22(4), 1-16. <https://doi:10-1145/2724710>
- U. S. Department of Health & Human Services (1979). *The Belmont report: Ethical principles and guidelines for the protection of human subjects of research..*  
Retrieved from <https://www.hhs.gov>
- Vermeir, P., Blot, S., Degroote, S., Vandijck, D., Mariman, A., Vanacker, T., & Vogelaers, D. (2018). Communication satisfaction and job satisfaction among critical care nurses and their impact on burnout and intention to leave: A questionnaire study. *Intensive and Critical Care Nursing*, 48, 21–27.  
<https://doi:10.1016/j.iccn.2018.07.001>
- Vlacsekova, D., & Mura, L. (2017). Effect of motivational tools on employee satisfaction in small and medium enterprises. *Oeconomia Copernicana*, 8(1), 111-130.  
Retrieved from <https://www.ceeol.com/search/article-detail?id=521734>
- Warton, D., Thibaut, L., & Wang, Y. (2017). The PIT-trap-a “model-free” bootstrap procedure for inference about regression models with discrete, multivariate responses. *PLoS ONE* 12(7). ,e0181790\_

- Wei, H., King, A., Jiang, Y., Sewell, K. A., & Lake, D. M. (2020). The impact of nurse leadership styles on nurse burnout: A *Systematic Literature Review*. *Nurse Leader*, 18(5), 439–450. <https://doi:10.1016/j.mnl.2020.04.002>
- Wells, R., Kolek, E., Williams, E., & Saunders, D. (2015). "How we know what we know": Systematic comparison of research methods employed in higher education journals, 1996-2000 v. 2006-2010. *Journal of Higher Education*, 86(2), 171-198. <https://doi:10.1080/00221546.2015.11777361>
- World Health Organization. (2018). *Global strategy on human resources for health: Workforce 2030*. [https://www.who.int/hrh/resources/pub\\_globstrathrh-2030/en/](https://www.who.int/hrh/resources/pub_globstrathrh-2030/en/)
- World Health Organization. (2020). *Shortage of personal protective equipment endangering health workers worldwide*. <https://www.who.int/news/items//03-03-2020-shortage-of-personal-protective-equipment-endangering-health-workers-worldwide>
- Worthy K., Dawson R. M., & Tavakoli A. S. (2020). Relationships among nursing deans' leadership styles and faculty job satisfaction levels. *Journal of Nursing Education*, 59(2):68-75. <https://doi:10.3928/01484834-20200122-0>
- Wu, X., Hayter, M., Lee, A. J., Yuan, Y., Li, S., Bi, Y., & Zhang, Y. (2020). Positive spiritual climate supports transformational leadership as means to reduce nursing burnout and intent to leave. *Journal of Nursing Management*, 28(4), 804–813. <https://doi:10.1111/jonm.12994>

Yahaya, R., & Ebrahim, F. (2016). Leadership styles and organizational commitment: literature review. *Journal of Management Development*, 35(2), 190–216.

<https://doi:10.1108/jmd-01-2015-0004>

Yin, R. K. (2018). *Case study research and applications designs and methods*. Thousand Oaks, CA: SAGE Publications.

## Appendix A: License to use MLQ 5x Short Form

For use by Kelli Casey only. Received from Mind Garden, Inc. on June 21, 2021

**Permission for Kelli Casey to reproduce 50 copies  
within three years of June 21, 2021**

**Multifactor Leadership Questionnaire™****Instrument (Leader and Rater Form)****and Scoring Guide  
(Form 5X-Short)****by Bruce Avolio and Bernard Bass**

Published by Mind Garden, Inc.

info@mindgarden.com

www.mindgarden.com

**IMPORTANT NOTE TO LICENSEE**

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

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

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

*This instrument is covered by U.S. and international copyright laws as well as various state and federal laws regarding data protection. Any use of this instrument, in whole or in part, is subject to such laws and is expressly prohibited by the copyright holder. If you would like to request permission to use or reproduce the instrument, in whole or in part, contact Mind Garden, Inc.*

© 1995 Bruce Avolio and Bernard Bass. All rights reserved in all media.

Published by Mind Garden, Inc., [www.mindgarden.com](http://www.mindgarden.com)

## Appendix B: Permission to use TIS-6 Survey

### RE: Turnover Intention Scale

**From:** Kelli Casey <kelli.casey@waldenu.edu>  
**Sent:** Sunday, 01 December 2019 19:12  
**To:** grootd@uj.ac.za  
**Subject:** Turnover Intention Scale

Good Day,

My name is Kelli Casey and I am a doctoral student at Walden University writing my doctoral study titled "Relationship Between Path-Goal Theory and RN Turnover Intentions" in the long-term care industry. My committee chair is Dr. Natalie Casale.

I would like to request permission to use an existing survey instrument (Turnover Intention) in my research study. I would like to use and print your survey instrument; the Turnover Intention 6-item scale. I will only use the research instrument for this study.

Thank you,

Kelli Casey

Walden University Doctoral Student

---

This email and all contents are subject to the following disclaimer:

<http://disclaimer.uj.ac.za>

### RE: Turnover Intention Scale



Mon 12/2/2019 1:19 AM

Kelli Casey



Dear Kelli

You are welcome to use the TIS for your research. For this purpose please find the TIS-15 attached for your convenience. This TIS-6 consist (version 4) of the first six items high-lighted in yellow. The TIS is based on the Theory of Planned Behaviour.

The only two conditions for using the TIS are that it may not be used for commercial and purposes and second that it should be properly referenced (Roodt, 2004) as in the article by Bothma & Roodt (2013) you referred to.

It is easy to score the TIS-6. Merely add the item scores to get a total score. The midpoint of the scale is 18 (3 x 6). If the total score is below 18 then it indicates a desire to stay. If the scores are above 18 it indicates a desire to leave the organisation. The minimum a person can get is 6 (6 x 1) and the maximum is 30 (5 x 6). No item scores need to be reflected (reverse scored).

It is recommended that you conduct a CFA on the item scores to assess the dimensionality of the scale. We found that respondents with a matric (grade 12) tertiary school qualification tend to understand the items better and consequently a uni-dimensional factor structure is obtained.

If you wish to translate the TIS in a local language, you are welcome to do so. It is recommended that a language expert is used in the translate – back translate method.

I wish you all the best with your research!

Best regards

Prof Gert Roodt

## Appendix C: MLQ 5x short form

For use by Kelli Casey only. Received from Mind Garden, Inc. on May 15, 2020

### Multifactor Leadership Questionnaire Rater Form

Name of Leader: \_\_\_\_\_ Date: \_\_\_\_\_

Organization ID #: \_\_\_\_\_ Leader ID #: \_\_\_\_\_

This questionnaire is used to describe the leadership style of the above-mentioned individual as you perceive it. Answer all items on this answer sheet. **If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank.** Please answer this questionnaire anonymously.

**Important** (necessary for processing): Which best describes you?

- I am at a higher organizational level than the person I am rating.
- The person I am rating is at my organizational level.
- I am at a lower organizational level than the person I am rating.
- Other than the above.

Forty-five descriptive statements are listed on the following pages. Judge how frequently each statement fits the person you are describing. Use the following rating scale:

Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
0	1	2	3	4

*The Person I Am Rating ...*

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. Provides me with assistance in exchange for my efforts.....                                   | 0 | 1 | 2 | 3 | 4 |
| 2. *Re-examines critical assumptions to question whether they are appropriate.....               | 0 | 1 | 2 | 3 | 4 |
| 3. Fails to interfere until problems become serious.....   | 0 | 1 | 2 | 3 | 4 |
| 4. Focuses attention on irregularities, mistakes, exceptions, and deviations from standards..... | 0 | 1 | 2 | 3 | 4 |
| 5. Avoids getting involved when important issues arise.....                                      | 0 | 1 | 2 | 3 | 4 |
| 6. *Talks about his/her most important values and beliefs.....                                   | 0 | 1 | 2 | 3 | 4 |
| 7. Is absent when needed.....  | 0 | 1 | 2 | 3 | 4 |
| 8. *Seeks differing perspectives when solving problems.....                                      | 0 | 1 | 2 | 3 | 4 |
| 9. *Talks optimistically about the future.....   | 0 | 1 | 2 | 3 | 4 |
| 10. *Instills pride in me for being associated with him/her.....                                 | 0 | 1 | 2 | 3 | 4 |
| 11. Discusses in specific terms who is responsible for achieving performance targets.....        | 0 | 1 | 2 | 3 | 4 |
| 12. Waits for things to go wrong before taking action.....                                       | 0 | 1 | 2 | 3 | 4 |
| 13. *Talks enthusiastically about what needs to be accomplished.....                             | 0 | 1 | 2 | 3 | 4 |
| 14. *Specifies the importance of having a strong sense of purpose.....                           | 0 | 1 | 2 | 3 | 4 |
| 15. *Spends time teaching and coaching.....  | 0 | 1 | 2 | 3 | 4 |

Continued →

For use by Kelli Casey only. Received from Mind Garden, Inc. on May 15, 2020

Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
0	1	2	3	4
16. Makes clear what one can expect to receive when performance goals are achieved.....	0	1	2	3 4
17. Shows that he/she is a firm believer in "If it ain't broke, don't fix it.".....	0	1	2	3 4
18. *Goes beyond self-interest for the good of the group.....	0	1	2	3 4
19. *Treats me as an individual rather than just as a member of a group.....	0	1	2	3 4
20. Demonstrates that problems must become chronic before taking action.....	0	1	2	3 4
21. *Acts in ways that builds my respect.....	0	1	2	3 4
22. Concentrates his/her full attention on dealing with mistakes, complaints, and failures.....	0	1	2	3 4
23. *Considers the moral and ethical consequences of decisions.....	0	1	2	3 4
24. Keeps track of all mistakes.....	0	1	2	3 4
25. *Displays a sense of power and confidence.....	0	1	2	3 4
26. *Articulates a compelling vision of the future.....	0	1	2	3 4
27. Directs my attention toward failures to meet standards.....	0	1	2	3 4
28. Avoids making decisions.....	0	1	2	3 4
29. *Considers me as having different needs, abilities, and aspirations from others.....	0	1	2	3 4
30. *Gets me to look at problems from many different angles.....	0	1	2	3 4
31. *Helps me to develop my strengths.....	0	1	2	3 4
32. *Suggests new ways of looking at how to complete assignments.....	0	1	2	3 4
33. Delays responding to urgent questions.....	0	1	2	3 4
34. *Emphasizes the importance of having a collective sense of mission.....	0	1	2	3 4
35. Expresses satisfaction when I meet expectations.....	0	1	2	3 4
36. *Expresses confidence that goals will be achieved.....	0	1	2	3 4
37. Is effective in meeting my job-related needs.....	0	1	2	3 4
38. Uses methods of leadership that are satisfying.....	0	1	2	3 4
39. Gets me to do more than I expected to do.....	0	1	2	3 4
40. Is effective in representing me to higher authority.....	0	1	2	3 4
41. Works with me in a satisfactory way.....	0	1	2	3 4
42. Heightens my desire to succeed.....	0	1	2	3 4
43. Is effective in meeting organizational requirements.....	0	1	2	3 4
44. Increases my willingness to try harder.....	0	1	2	3 4
45. Leads a group that is effective.....	0	1	2	3 4

Copyright © 1995 by Bernard Bass and Bruce Avolio. All rights reserved. It is your legal responsibility to compensate the copyright holder of this work for any reproduction in any medium. If you need to reproduce the MLQ, please contact Mind Garden [www.mindgarden.com](http://www.mindgarden.com). Mind Garden is a registered trademark of Mind Garden, Inc.

## Appendix D: TIS-6

## TURNOVER INTENTION SCALE (TIS)

Copyright © 2004, G. Roodt

The following section aims to ascertain the extent to which you intend to stay at the organization.

Please read each question and indicate your response using the scale provided for each question.

DURING THE PAST 9 MONTHS.....

How often have you considered leaving your job?	Never	1-----2-----3-----4-----5	Always
How frequently do you scan the newspapers in search of alternative job opportunities?	Never	1-----2-----3-----4-----5	All the time
How satisfying is your job in fulfilling your personal needs?	Very satisfying	1-----2-----3-----4-----5	Totally dissatisfying
How often are you frustrated when not given the opportunity at work to achieve your personal work-related goals?	Never	1-----2-----3-----4-----5	Always
How often are your personal values at work compromised?	Never	1-----2-----3-----4-----5	Always
How often do you dream about getting another job that will better suit your personal needs?	Never	1-----2-----3-----4-----5	Always
How likely are you to accept another job at the same compensation level should it be offered to you?	Highly unlikely	1-----2-----3-----4-----5	Highly likely
How often do you look forward to another day at work?	Always	1-----2-----3-----4-----5	Never

How often do you think about starting your own business?	Never	1-----2-----3-----4-----5	Always
To what extent do responsibilities prevent you from quitting your job?	To no extent	1-----2-----3-----4-----5	To a very large extent
To what extent do the benefits associated with your current job prevent you from quitting your job?	To no extent	1-----2-----3-----4-----5	To a very large extent
How frequently are you emotionally agitated when arriving home after work?	Never	1-----2-----3-----4-----5	All of the time
To what extent does your current job have a negative effect on your personal well-being?	To no extent	1-----2-----3-----4-----5	To a very large extent
To what extent does the "fear of the unknown", prevent you from quitting?	To no extent	1-----2-----3-----4-----5	To a very large extent
How frequently do you scan the internet in search of alternative job opportunities?	Never	1-----2-----3-----4-----5	All of the time