

2020

Relationship Between Nurse Job Satisfaction Variables and Voluntary Turnover Intention

Mmayen Monday Nnah
Walden University

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



Part of the [Health and Medical Administration 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.

Walden University

College of Management and Technology

This is to certify that the doctoral study by

Mmayen M. Nnah

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. Christopher Beehner, Committee Chairperson, Doctor of Business Administration
Faculty

Dr. Craig Martin, Committee Member, Doctor of Business Administration Faculty

Dr. Gwendolyn Dooley, University Reviewer, Doctor of Business Administration Faculty

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

Walden University
2020

Abstract

Relationship Between Nurse Job Satisfaction Variables and Voluntary Turnover Intention

by

Mmayen M. Nnah

MA, Eastern Michigan University, 2009

BA, Rutgers University, 2006

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

December 2020

Abstract

Increased turnover among hospital nurses has adverse business outcomes. Hospital nurse managers are concerned with minimizing turnover to reduce hospital costs, lower risk to patients, and positively impact hospital performance. Grounded in motivation-hygiene theory, the purpose of this quantitative correlational study was to examine the relationship among nurses' views of the quality of work environments, level of management support, opportunities for promotion, and nurses' voluntary turnover intentions. Data were collected from nurses with registered nurse status or a bachelor of science in nursing degrees working in hospital settings in the United States ($N = 82$), who completed the *Job Satisfaction Survey* and the *Turnover Intentions Scale*. The results of the multiple linear regression analysis indicated the full model, containing the 3 predictor variables (work environment, management support, opportunities for promotion), did significantly predict nurses' voluntary turnover intentions, $F(3, 78) = 7.29, p < .001, R^2 = .219$. Quality of work environment ($t = 4.598, p < .001$) was the only predictor to make a statistically significant contribution to the model. Key recommendations for nurse managers include providing employee support programs and adequate scheduling support staff such as housekeeping and administrative personnel. The implication for social change includes the potential to improve the work environment for nurse managers and improve medical care for community members.

Relationship Between Nurse Job Satisfaction Variables and Voluntary Turnover Intention

by

Mmayen M. Nnah

MA, Eastern Michigan University, 2009

BA, Rutgers University, 2006

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

December 2020

Dedication

I dedicate this study to my parents, Mr. & Mrs. Monday Nnah, who instilled in me a love of learning and the confidence that I can do whatever I set out to do. They taught me from a young age that through Christ, all things are possible. I also dedicate this study to the late Dr. Kufre Akpabio, who lived to see me begin this doctoral program with words of encouragement, believed in me, and inspired me to start this program and was no longer alive to see me complete it, but his spirit lives on. Lastly, I dedicate this study to my three lovely brothers (Nnamdie, Ubon, and Dr. Ekpeno) and their families, who continuously support and encourage me to push through the rough times that I faced during this program; thank you for your patience and for standing beside me throughout this program. I am blessed with the best parents and siblings anyone could have asked for.

Acknowledgments

I would like to thank God for allowing me to go through this journey successfully. Thank you to my family and friends for being such an amazing, encouraging, wonderful, and inspirational supporter and have walked with me through this journey. Thank you for standing in for me when I had to be away to work on my research. I want to acknowledge my chair, Dr. Chris Beehner, for his encouragement, support, feedback, and Dr. Martin, for all your help along this journey. Thank you, Dr. Beehner, for pushing me and sticking with me so I do not give up. You are the best chair anyone could have asked for! I would also like to acknowledge my school counselor Jill Kaspszak for guiding me whenever I need some guidance. I appreciate my committee's support throughout this entire journey; I would not be here without you guys.

I would especially like to acknowledge all the nurses who help me complete this program by completing my study survey. Thank you for taking the time to respond to my survey via social media posts (Facebook and LinkedIn) and for the confidence you have in me to use you during my data collection period. Special thanks to my friends and families for being such a unique, patiently, wonderful, encouraging, and inspirational supporter through this journey.

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	3
Purpose Statement.....	3
Nature of the Study	4
Research Question	5
Hypotheses	6
Theoretical Framework.....	6
Operational Definitions.....	7
Assumptions, Limitations, and Delimitations.....	8
Assumptions.....	8
Limitations	8
Delimitations.....	9
Significance of the Study	9
Contribution to Business Practice.....	10
Implications for Social Change.....	10
A Review of the Professional and Academic Literature.....	11
Application to the Applied Business Problem	13

Literature on the Theoretical Framework: Herzberg’s Motivation-Hygiene	
Theory and Mobley’s Theory	13
Research Studies Using Herzberg’s Motivation-Hygiene Theory.....	15
Herzberg’s motivation-hygiene theory	19
Mobley’s Theory.....	20
Job Satisfaction Summary.....	20
Job Satisfaction Instrument.....	21
Work Environment.....	21
Work Environment Measurement.....	22
Management Support	29
Management Support Measurement	30
Promotion Opportunities.....	33
Promotion Opportunities Measurement	34
Turnover Intention	39
Turnover Intention Measurement	39
Transition	48
Section 2: The Project.....	49
Purpose Statement.....	49
Role of the Researcher	50
Participants.....	51
Research Method	52
Research Design.....	53

Transition and Summary.....	79
Section 3: Application to Professional Practice and Implications for Change.....	80
Introduction.....	80
Presentation of the Findings.....	80
Descriptive Statistics.....	85
Inferential Results.....	86
Applications to Professional Practice.....	94
Implications for Social Change.....	95
Recommendations for Action.....	96
Recommendations for Further Research.....	97
Reflections.....	99
Conclusion.....	100
References.....	102
Appendix A: Job Satisfaction Survey.....	132
Appendix B: Turnover Intention Scale.....	134
Appendix C: Request to Use Job Satisfaction Survey Instrument.....	136
Appendix D: Permission to use Job Satisfaction Survey Instrument.....	137
Appendix E: Request to use TIS-6 Instrument.....	138
Appendix F: Permission to use TIS-6 Instrument.....	139

List of Tables

Table 1. Synopsis of Sources in the Literature Review	12
Table 2. Reliability Statistics for Study Constructs	81
Table 3. Multicollinearity Statistics	82
Table 4. Means and Standard Deviations for Predictor and Criterion Variables.....	85
Table 5. Descriptive Statistics for Demographic Variables.....	86
Table 6. Regression Analysis Summary for Predictor Variables	87
Table 7. Test of Normality	88
Table 8. Skewness and Kurtosis Descriptive.....	93

List of Figures

Figure 1. Model of Herzberg's theory (adapted from Herzberg source)	7
Figure 2. Power as a function of sample size.....	57
Figure 3. RNs Workforce.....	67
Figure 4. Normal probability plot (P-P) of the regression standardized residuals.....	83
Figure 5. Scatterplot of the standardized residuals	84
Figure 6. Boxplot of outliers.....	84
Figure 7. Histogram of Turnover Intention.....	89
Figure 8. Normal (Q-Q) plot of Turnover Intention.	89
Figure 9. Histogram of Intrinsic-Work Environment.	90
Figure 10. Normal (Q-Q) plot of Intrinsic-Work Environment.....	90
Figure 11. Histogram of Intrinsic- Management Support.....	91
Figure 12. Normal (Q-Q) plot of Intrinsic- Management Support	91
Figure 13. Histogram of Extrinsic-Opportunity for promotion.	92
Figure 14. Normal (Q-Q) plot of Extrinsic-Opportunity for promotion.....	92

Section 1: Foundation of the Study

Almost 40% of nurses working in hospitals have expressed dissatisfaction with their positions (Bormann & Abrahamson, 2014). The dissatisfaction among nurses leads to an increase in the turnover rate. According to the 2020 NSI National Health Care Retention and Registered Nurse (RN) Staffing Report, since 2015, the average hospital turned over 89% of its workforce, and the national total hospital turnover rate is 17.8%, with ranges from 6.9% to 43.7% (NSI Nursing Solutions, 2020). In conducting my research, I examined the relationship between the three independent variables of quality of work environment, level of management support, opportunity for promotion, and the dependent variable of voluntary turnover intention that tend to drive job dissatisfaction among nurses. Using a quantitative correlational methodology, I examined the problem to understand how the quality of work environment, level of management support, and opportunity for promotion affected turnover intention to help the organization with its existing turnover intention.

Background of the Problem

In 2020, NSI National Health Care Retention and RN Staffing Report stated the average cost of turnover for a bedside RN is \$44,400 and ranges from \$33,300 to \$56,000, which results in a hospital losing an average of \$3.6 million to \$6.1 million. According to Duffield, Roche, Homer, Buchan, and Dimitrelis (2014), turnover among nurses is a critical issue worldwide, impacting hospital budgets negatively and resulting in negative safety outcomes for nurses and patients. Examining the relationship between the key factors that derive job dissatisfaction, such as quality of work environment, level

of management support, opportunity for promotion, and nurses' voluntary turnover intention, could improve patient outcomes and financial relief in hospitals.

Nurse turnover is an ongoing serious problem in the world. Roche, Duffield, Homer, Buchan, and Dimitrelis (2015) noted that nurse turnover consists of two types of costs: *direct costs*, such as recruitment, a temporary replacement, and hiring a new employee to comprise 21% of total costs; and *indirect costs* that include the cost of training new employees, orientation, termination, and decreased productivity as newly employed nurses become fully productive account for 79% of total costs. According to Hayward, Bungay, Wolff, and MacDonald (2016), in the United States, nearly 50% of newly graduated nurses leave their workplace within 3 years of entering practice, which costs an estimated \$1.4 to \$2.1 billion (Kovner et al., 2016). To retain new nurses, nurse managers need to understand more leadership styles and implement management training to successfully assess their subordinates' needs (Asamani, Naab, & Ofei, 2016).

Given the current trends of high job dissatisfaction among nurses in the healthcare industry, examining the level of voluntary turnover intention could offer an opportunity to understand the causes and aid in retaining nurses from leaving an organization. Job dissatisfaction among nurses has become a challenge as the turnover rate increases (Atefi, Abdullah, Wong, & Mazlom, 2014; Cho et al., 2015). Many healthcare leaders must address the nurse turnover issue, which is expensive to both organizations and society (Kovner et al., 2016).

Problem Statement

The issue of high employee turnover among nurses is problematic, resulting in low staff morale, poorer job satisfaction, and reduced quality of patient care (Asegid, Belachew, & Yimam, 2014; Roche et al., 2015). The turnover cost is \$44,380 to \$63,400 per nurse, resulting in estimated average annual losses of \$4.21 to \$6.02 million per U.S. hospital (Yarbrough, Martin, Alfred, & McNeill, 2017). The general business problem is that some nurse managers are negatively impacted by nurses' voluntary turnover intentions, which results in significant financial expenditures. The specific business problem is that some nurse managers may not know the relationship between nurses' views of the quality of work environment, level of management support, and opportunity for promotion and nurses' voluntary turnover intentions; such knowledge could be used to reduce attrition.

Purpose Statement

The purpose of this quantitative correlational study was to examine the relationship among nurses' views of the quality of work environments, level of management support, opportunities for promotion, and nurses' voluntary turnover intentions. The independent variables were quality of work environment, level of management support, and opportunity for promotion, and the dependent variable was the nurses' voluntary turnover intention. The job satisfaction survey (JSS) instrument was used to measure the independent variables, while the turnover intentions scale (TIS) was used to measure the dependent variable. The target population comprised nurses with RN status, or holding a bachelor of sciences in nursing (BSN) degree, working in hospital

settings in the United States. The implication for social change was the promotion of healthy work environments by nurse managers who may improve nurses' quality of care to members of the community. Improving nurses' work environment and the quality of patient care provided may improve patient quality of life, contributing to improved quality of life for families and communities.

Nature of the Study

I selected quantitative research to examine the relationship of independent variables of quality of work environment, level of management support, and opportunity for promotion, and the dependent variable of voluntary turnover intention among nurses working in hospital settings. The quantitative method was appropriate because the focus was on numerical data of statistical analysis to test hypotheses and examine the relationships between independent and dependent variables to analyze the data outcome results. Researchers use the qualitative method to focus on the human practices of participants' verbal interpretations of their experiences based on why, what, and how questions (Hussein, 2015; McCusker & Gunaydin, 2015). The mixed-method is a combination of qualitative and quantitative methods. The mixed-method was not suitable for this study. This study's purpose did not require integrating data from qualitative and quantitative methods to evaluate the research questions and provide a statistical outcome (Wisdom & Creswell, 2013). The qualitative and mixed-method methodologies were not appropriate for this study because I examined the relationships among variables and not the participants' practices and experiences.

I chose a correlational design to examine the relationship between independent and dependent variables implementing questionnaires and surveys (Ben-Natan et al., 2014). Researchers use the descriptive comparative design to compare the testable variables' characteristics to determine whether a significant relationship exists between the variables (Britton, 2017). Other quantitative research designs, such as quasi-experimental and experimental designs, would not meet this study's purpose because they are more suitable for establishing the cause-effect relationship among measurable variables. Because researchers use a quasi-experimental design to produce causation between independent and dependent variables (Czerniak & Berkner, 2016), this design was not appropriate for this study. Similarly, the experimental design employs matching and identifying comparable groups and evaluating decision-making (Zellmer-Bruhn, Caligiuri, & Thomas, 2016). However, in this study, I aimed to examine the relationship between the independent and dependent variables through questionnaires and surveys from eligible participants and not evaluate the cause-effect relationship among variables.

Research Question

The following omnibus research question guided the study:

RQ: What is the relationship among quality of work environment, level of management support, opportunity for promotion, and nurses' voluntary turnover intention?

Hypotheses

*H*₀: A significant relationship does not exist among quality of work environment, level of management support, opportunity for promotion, and nurses' voluntary turnover intention at hospitals.

*H*_a: A significant relationship does exist among the quality of work environment, level of management support, opportunity for promotion, and nurses' voluntary turnover intention at hospitals.

Theoretical Framework

I considered two theories: (a) Herzberg's motivation-hygiene theory and (b) Mobley's theory of employee turnover decisions process. Herzberg developed the two-factor theory in 1959, which focuses on extrinsic (motivation) and intrinsic (hygiene) factors. These factors give people job satisfaction (job content) and job dissatisfaction (job context). Mobley's theory was developed in 1977 to explain the decision-making process of employees leaving an organization based on dissatisfaction (Mobley, 1977).

Herzberg's theory was used to examine the effect of extrinsic (motivation) and intrinsic (hygiene) factors on job satisfaction and dissatisfaction. Herzberg theorized that extrinsic (motivation) factors increase and improve job satisfaction, whereas intrinsic (hygiene) factors have an element that reduces job dissatisfaction (Alshmemri, Shahwan-Akl, & Maude, 2016). As applied to this study, Herzberg's (1968) theory may provide a lens to examine the relationships among quality of work environment, level of management support, and opportunity for promotion to predict nurses' voluntary turnover intention in hospitals. Examining the relationships among these independent variables

will assist in identifying factors that cause nurse turnover intention. Figure 1 shows a model of Herzberg's theory as it applies to this study.

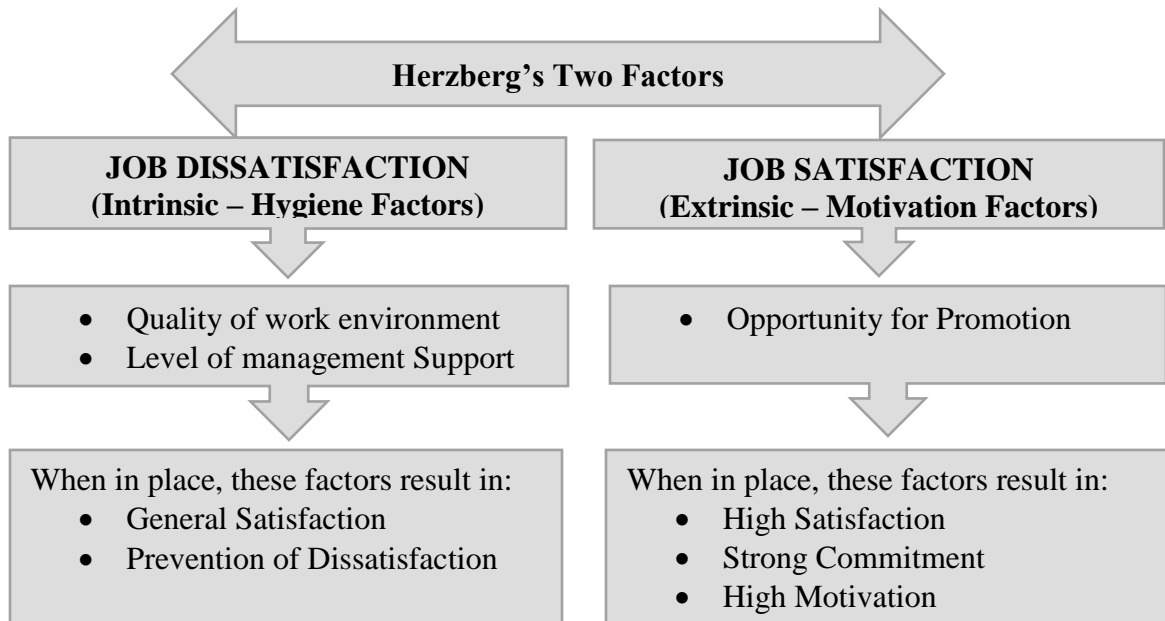


Figure 1. Model of Herzberg's theory (adapted idea from <https://humanlife.asia/herzbergs-human-factor-theory/>)

Operational Definitions

Job Dissatisfaction: The condition or feeling of being displeased with one's overall job experience due to job stress (Ouyang, Sang, Li, & Peng, 2015).

Job Satisfaction: The condition of having a positive emotional state outcome from a person's appraisal of their job (Chen, Yang, Feng, & Tighe, 2017).

Management Support: The degree to which employees form impressions that management support helps lower their emotional exhaustion, supporting individual healthy work-life balance that encourages efficient work in the organization (Boamah & Laschinger, 2016).

Opportunities for Promotion: To enhance employees' chances of receiving more salary, benefits, and prestige allied with the advanced position when they display satisfied work behavior in the organization (Rubel & Kee, 2015).

Voluntary Turnover Intention: Represents individuals who voluntarily leave to look for other jobs or transfer from their position (Roche et al., 2015).

Work Environment (WE): The surrounding conditions in which an employee works involve social interactions with peers, subordinates, and managers. (Almuhsen, Alkorashy, Baddar, & Qasim, 2017).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are facts that researchers consider true but cannot verify (Marshall & Rossman, 2014). This study's first assumption was that participants would provide honest and thoughtful answers to the survey questions. The second assumption was that the participants would complete all the survey questions. The last assumption was that traditional data collection (paper-based) would generate more response rates than an online data collection process.

Limitations

According to Marshall and Rossman (2014), limitations are potential weaknesses of a study. A potential limitation of this study was that the target population's geographic location was limited only to the United States, which may provide a limited perspective of nurses from other countries. A second potential limitation was that the survey questionnaires were limited to RNs or those with a BSN; therefore, the results might not

be generalizable to nurses without RN or BSN. A third potential limitation of the study was that the target population was limited to hospital settings and may not represent nurses' views working in other industry settings. This study's final potential limitation was the target population being limited to nurses with an employment history of at least 2 years. This may offer a limited view of the total hospital setting experience. Future researchers should extend years of experience (employment history) for the target population to understand the effect with larger populations.

Delimitations

The delimitations are characteristics that will limit the scope and define the boundaries of a study (Yusuf, 2015). The first delimitation was that this study only included nurses employed as RNs or those with a BSN. The second delimitation was that only nurses who reside in the United States were included because the population would contain numerous hospitals with RN or BSN nurses to have greater access to a larger population. The exclusion criteria were (a) nurses working in a group home setting, (b) nurses with a licensed practical nurse or licensed vocational nurse certification, (c) nurses with less than 2 years working experience in a hospital setting, and (d) nurses who did not reside in the United States.

Significance of the Study

This study's significance is that the findings could improve awareness of job satisfaction and dissatisfaction levels and the effect of nurse turnover intention on leaders in hospitals. Nurse job satisfaction has shown a significant positive impact on the quality of care (Laschinger & Fida, 2015). Therefore, this may help hospital leaders develop

strategies to increase nurses' job satisfaction and reduce turnover rates. This study's results may offer hospital leaders additional information to understand how the work environment, management support, and opportunity for promotion affect retention and employees' job satisfaction levels.

Contribution to Business Practice

The study may contribute to business's effective practices by adding to the existing body of knowledge, developing effective management supports to work with employees, and creating a stable relationship while working together to reach the organization's objectives regarding nurse turnover intentions. Researchers have found that nursing turnover is costly, and nurse turnover rates place substantial demands on hospital budgets (Dasgupta, 2015; Roche et al., 2015). The study results may further contribute to the business practice by educating business leaders about the direct and indirect costs associated with nurses' high turnover rates. Also, a decrease in high job dissatisfaction by improving the quality of work environment increased management support, and creating more job opportunities to promote nurses could help leaders save money overall while retaining nurses from leaving the organization.

Implications for Social Change

The study may contribute to social change by promoting healthy work environments, resulting in improved quality of care provided by nurses. Increases in nurse job satisfaction have been demonstrated to result in higher patient care quality by nurses (Laschinger et al., 2015). Improved patient care may contribute to improved quality of life for the patients, their families, and the community. Nurses who feel

motivated and empowered within their organizations will perform more effectively while improving their relationship with patients. Providing excellent care in a hospital setting improves patient outcomes and provides a valuable resource to enhance entire communities through increased education, awareness, and health.

A Review of the Professional and Academic Literature

The purpose of this quantitative correlational study was to examine the relationship among the three independent variables of quality of work environment, level of management support, and opportunity for promotion and the dependent variable turnover intention to reduce attrition. The literature provided in the application to the applied business problem includes the study's purpose statement and hypotheses, the theoretical framework with additional details, and the dependent and independent variables and their measurement.

A literature review is a critical analysis of peer-reviewed articles relevant to a study's theoretical framework and variables. This literature review provides a synthesis of literature about employees who are RNs or have a BSN and experienced job satisfaction or dissatisfaction. The following literature comes from peer-reviewed nursing journals and other reports, such as *Journal of Nursing Administration*, *International Journal of Nursing Studies*, *Journal of Economy & Society*, *Journal of Applied Psychology*, *Health Services Management Research*, *Journal of Economic & Behaviors Studies*, *Dissertation & Scholarly Research*, and *Organization Behavior & Human Performance*.

The strategy for searching literature is to use the right keywords to narrow the search for specific areas pertinent to a study. The following keywords were used: *job satisfaction, job dissatisfaction, job turnover, work environment, promotion, management support, and leaving intention* to provide in-depth information and important documentation. In addition to these keywords, the search parameters were the Boolean operator of “‘and’ and ‘or’” that helped focus and find relevant articles. My search of academic literature reviews was through the following databases: EBSCO Host, Google Scholar, Sage, ProQuest Central, Elsevier, and Science Direct. I filtered search results by publication date to limit to those published after the year 2010; results consisted of several peer-reviewed articles, books, dissertations, and other relevant materials related to this study.

Table 1

Synopsis of Sources in the Literature Review

References type	Within 5 years	More than 5 years	Total	Percentage
Peer-reviewed articles	109	31	140	73%
Non-peer-reviewed articles	24	10	34	18%
Contemporary books	0	0	0	0%
Government websites	0	2	2	1%
Dissertation	2	0	2	1%
Other websites	11	3	14	7%
Total	146	46	192	100%

An assessment of published peer-reviewed literature is crucial to research. I excluded several inadequate articles due to a lack of sufficient information to assist with the study. Moreover, the articles are left out because they can introduce biased estimates of completion rates in the study if their outcomes are different from the subject matter.

The results of the assessment only comprised of articles published after the year 2014. This review's literature consists of 85% peer-reviewed articles published from 2015 to 2019, and the remaining 15% contains peer-reviewed articles published before the year 2014. I organized the application to the applied business problem as follows: a restatement of the envisioned study's purpose statement and hypotheses, analysis of the literature of theoretical framework, analysis of the literature of the independent variables and their measures, and an analysis of the literature of the dependent variable and its measurement.

Application to the Applied Business Problem

I tested the following hypotheses in this study:

H_0 : A significant relationship does not exist among the quality of work environment, level of management support and opportunity for promotion, and nurses' voluntary turnover intention at hospitals.

H_a : A significant relationship does exist among the quality of work environment, level of management support and opportunity for promotion, and nurses' voluntary turnover intention at hospitals.

Literature on the Theoretical Framework: Herzberg's Motivation-Hygiene Theory and Mobley's Theory

In reviewing the literature, I found that several theorists have applied the concepts of Herzberg's (1968) theory to examine factors contributing to job (dis)satisfaction and Mobley's (1977) theory to explain employees' decision to leave a job. Herzberg's two-factor theory was developed in 1959 by psychologist Frederick Herzberg. Herzberg

emphasized intrinsic and extrinsic factors to explain that hygiene (job context) factors contribute to job dissatisfaction while motivator (job content) factors contribute to job satisfaction produced by different work factors (Ataliç, Can, & Cantürk, 2016). William Mobley developed Mobley's (1977) theory to highlight the employee decision process to withdraw from their organization and job dissatisfaction.

Based on Herzberg's (1968) motivation-hygiene theory and Mobley's (1977) theory background, I focused on using Herzberg's motivation-hygiene theory to highlight factors that may contribute to job dissatisfaction and satisfaction among nurses in the hospital setting rather than Mobley's (1977) theory. Herzberg's theory is more suitable than Mobley's theory due to nurses' expectations of their satisfaction and dissatisfaction levels, which was more useful to examine factors that account for nurses' satisfaction in the hospital. Unlike Mobley's theory, Herzberg's (1968) theory stated, "The opposite of job dissatisfaction is not job satisfaction, but no job dissatisfaction" (p. 7). The factors that are not satisfying must be dissatisfying because motivational factors are separate from hygiene factors. Herzberg's two-factor theory directly affects job satisfaction and dissatisfaction, whereby employees tend to be content with some aspects of their job but not with other facets of the job. The employees' attitudes affect performance; when employee satisfaction levels are high, dissatisfaction reduces, preventing poor job performance (Holston-Okoe & Mushi, 2018). Therefore, understanding employees' attitudes and other factors that affect job satisfaction may help managers develop plans to help employees be content with all aspects of the job.

Research Studies Using Herzberg's Motivation-Hygiene Theory

Several researchers have used Herzberg's two-factor theory when performing research on turnover intentions, focusing on factors that would result in job satisfaction and prevent job dissatisfaction among employees. Alshmemri et al. (2016) examined Saudi national nurses' job satisfaction levels working in three public hospitals in the Makkah region of Saudi Arabia. Alshmemri et al. used a descriptive method with Herzberg's motivation-hygiene theory as the study's framework with 272 participant nurses. Both qualitative and quantitative data were collected using a research instrument called the Nursing Work Index-Revised (NWI-R, 2000). Through Herzberg's motivation-hygiene theory, Alshmemri et al. found that nurses who do not have dependent adults to supervise were significantly more satisfied than nurses caring for independent adults. Alshmemri et al. further indicated that female nurses were dissatisfied with their job compared to male nurses regarding motivation factors and nurses who had 4-10 years' experience in nursing. Alshmemri et al. also found female nurses were dissatisfied with their job for several reasons, such as the perception of professional status, which included lack of professional respect, lack of support, no recognition, as well as consider a less desirable job option for women in their culture. Employing Herzberg's two-factor in organizations might help encourage and motivate employees to work harder and be satisfied with their job instead of thinking about leaving the job.

The relationships with employees and managers could affect nurses' job satisfaction levels. Bormann et al. (2014) examined the relationship between nurse perception of nurse managers' leadership behavior and nurses' job satisfaction levels.

Bormann et al. used a descriptive correlational design with a self-report survey methodology. The authors used convenience sample data that consisted of 117 nurses who completed the survey (Bormann et al., 2014). The age range of participants in Bormann et al.'s study was from less than 26 years of age to less than 60 years of age, and participants were employed for less than 5 years and more than 10 years. Through the survey methods used in the study, Bormann et al. found that nurses were satisfied with opportunities for promotion from nurse managers who have transformational and transactional leadership styles while dissatisfied with work, promotion, supervision, and coworkers from nurse managers with passive-avoidant leadership style. Establishing a positive relationship between employees and managers who have transformational and transactional leadership styles might reduce nurses' job dissatisfaction levels.

Some researchers study the challenges of the work environment employees are facing. Raziq and Maulabakhsh (2015) studied approximately 210 employees to analyze the impact of working environment on employee job satisfaction. Raziq and Maulabakhsh used self-administered data to examine the relationship between work environment and job satisfaction through a survey method. The survey data were collected randomly from the employees of banks, the telecommunication sector, and a university in Quetta, Pakistan. In addition, Raziq and Maulabakhsh used a 33-item questionnaire to find the overall working environment's impact on employee job satisfaction with a 5-point Likert scale to evaluate answers ranging from *not at all satisfied*, *dissatisfied*, *neither*, *somewhat satisfied* and *completely satisfied*. Moreover, Raziq and Maulabakhsh found that satisfaction level was determined by the difference between service performance as

perceived by the customer and their expectations in the organization. Providing a positive work environment with services such as recognizing the different factors might help reduce job burnout and workload while increasing employee job satisfaction and organizational support.

Herzberg's two-factor theory had a direct effect on job dissatisfaction and satisfaction on employees. Ibrahim (2014) examined the effect of extrinsic and intrinsic motivation on employee's organizational citizenship behavior (OCB) through the mediating role of organizational commitment with Herzberg's two-factor motivation theory. Ibrahim used a quantitative method with survey questionnaires of 176 employees in six work units. Ibrahim outlined Herzberg's two-factor motivation theory that a manager needs to handle the factors affecting the employee's job satisfaction by increasing job satisfaction level and employees' job performance. The results have shown that the effect of extrinsic and intrinsic motivation on employee's OCB was significant, in that intrinsic motivation still has a great effect. Still, the effect of extrinsic motivation cannot be ignored due to the effect of organizational commitment on employees' OCB. Ibrahim's study further showed that the employee with strong extrinsic and intrinsic motivation performed more OCB in dimensions of altruism, courtesy, sportsmanship, conscientiousness, and civic virtue, compared to an employee with poor extrinsic and intrinsic motivation. This study also shows that the effect of intrinsic motivation on employee's OCB is bigger than the effect of extrinsic motivation. Given that, the employee who was motivated by intrinsic factors can improve and perform more OCB in

dimensions of altruism, courtesy, sportsmanship, conscientiousness, and civic virtue compared to the employee motivated by extrinsic factors.

Job satisfaction is important to employees and can lead to motivation, high performance, and reduce turnover intention. Alfayad and Arif (2017) examined an understanding of the role of practicing employee voice in improving job satisfaction levels through the Herzberg two-factor theory. A cross-sectional design was used with a questionnaire to collect data from 300 non-managerial employees at one of the largest Jordanian private organizations (Alfayad & Arif, 2017). Alfayad and Arif found that employees' voice has a significant positive impact on job satisfaction. The results further showed that Herzberg's two-factor theory supported the relationship between employee voice and job satisfaction by considering employee voice as a motivational element, which leads to job satisfaction but does not reduce job dissatisfaction. Alfayad and Arif also found that employee voice was considered a unique and crucial element in improving job satisfaction levels and emboldens employees to be involved in their organizational vision implementation. Therefore, creating a culture where employees engage more and have a voice might lead to a high level of job satisfaction and increased productivity.

Keeping employees satisfied with their job is challenging in any organization. In contrast with Ibrahim's (2014) study, Alfayad and Arif (2017) used motivational and hygiene factors to look at job satisfaction of employees' perspective. The results of Ibrahim's study show that employees with strong extrinsic and intrinsic motivation tend to perform more, while Alfayad and Arif have shown that there was a positive

relationship between employee voice and job satisfaction. Given that, both results show the importance of employees when organizations acknowledge and support employees' expressions of ideas that may create a motivational environment to improve job satisfaction levels while contributing to organizational effectiveness. Adopting Herzberg's two-factor theory might help organizations keep employees satisfied, motivate employees to commit to the organization, and perform at a higher level.

Herzberg's Motivation-Hygiene Theory

The two factors of the motivation-hygiene theory are to explain job satisfaction at the workplace among staff. This theory is very popular among scholars and practitioners because of the insight it offers to the managers to help increase their employee's job satisfaction (Vijayakumar & Saxena, 2015). When employees experience job dissatisfaction, the outcome does not guarantee satisfaction because employees decide to leave the organization for better opportunities (Gov, 2015). Two Herzberg's theory further showed that the intrinsic (motivators) factor could create a good employee attitude that would result in an effective performance and satisfaction. In contrast, the extrinsic (hygiene) factor results in unfavorable employee attitudes that can lead to bad performance with dissatisfaction, which could cause the employee to start thinking about quitting the job (Holston-Okae & Mushi, 2018). This theory would further increase job satisfaction among nurses and turnover rate while reducing factors that cause job dissatisfaction among nurses. This theory was appropriate for this study because it covers all my variables.

Mobley's Theory

Mobley's theory demonstrates a turnover model between employee satisfaction and quitting based on the following facets: quit thinking, searching for other jobs, intention to quit, and actually quitting (AlBattat, Som, & Helalat, 2013). Additionally, the stages of job dissatisfaction and actual turnover, per the Mobley theory, force the employee to start thinking about quitting their present job and searching for alternative job environments. The theory could also help organizations predict job dissatisfaction and turnover intention situations while aiming to retain their employee (AlBattat & Som, 2013). Mobley's theory was not suitable for this study because this theory focused on the turnover process, not the other components in the study.

Job Satisfaction Summary

Job satisfaction has an important role that may drive employees to perform the job effectively while committed to the organization, which helps organizations reduce turnover rates and costs. Job satisfaction can lead to an increase in productivity, patient satisfaction, safety, and profit for the organization, which would significantly impact patient quality of care (Al Maqbali, 2015). In addition, job satisfaction was a key factor for nurse retention that would ensure high-quality care when there is an effective supportive work environment (Laschinger & Fida, 2015). Therefore, prioritizing factors that lead to job satisfaction among nurses in the hospital setting may enhance nurses' job satisfaction, resulting in positive outcomes such as increasing productivity and commitment to the organization.

Job Satisfaction Instrument

The Job Satisfaction Survey (JSS) instrument was used in this study to measure the independent variables. Job Satisfaction has multiple facets of job-related aspects to show employees' attitudinal reactions to their job. Spector (1985) developed the JSS instrument to measure the levels of employees' attitude regarding their job (dis)satisfaction. The instrument assesses the following 9 facet scales (a) pay, (b) promotion, (c) supervision, (d) fringe benefits, (e) contingent rewards, (f) operating conditions, (g) coworkers, (h) nature of the work, and (i) communication. These facets may lead to improve employees' job satisfaction and drive employees to be dissatisfied. Examining the concepts of the work environment, level of management support, opportunity for promotion, and the influence on nurses' voluntary turnover intention is vital to help healthcare leaders to reduce turnover rates. I believe I selected the appropriate measurement instrument for the study to investigate the reliability and validity of the results.

Work Environment

Nurses working in poor work environments also can cause job dissatisfaction among some employees, and organizations should explore improving the poor work environment to retain employees leaving their employer. Nantsupawat, Nantsupawat, Kunaviktikul, Turale, and Poghosyan (2016) also pointed out that improving working environments would reduce nurses' job dissatisfaction and burnout since nurses providing direct care in poor work environments tend to report higher burnout and lower job satisfaction. Nantsupawat et al. (2016) noted that poor work environments and low

staffing had challenged nurses' capability to deliver the highest quality of care, which might further increase stress and burnout. The issue of poor work environment among nurses is vital, should not be ignored, and instead requires hospital leaders' attention to create favorable work environments to support nurses in performing effectively and increasing job satisfaction levels while reducing burnout.

Work Environment Measurement

The work environment plays a vital role that can enhance employees' job satisfaction, and researchers should continue to investigate the workplace issue in the hospital settings. Almuhsen et al. (2017) identified nurses' perception of work environment characteristics by using a correlation descriptive research design. The study by Almuhsen et al. (2017) comprised 364 staff nurses and 101 first-line nurse managers, whereby most of the participants were female. The authors defined work environment as the surrounding conditions in which an employee works. Given that, a study by Nguyen, Dang, and Nguyen (2015) noted that the work environment needs to improve continuously due to the positive impact on the employees' productivity. Almuhsen et al. noted that when nursing work environments are in healthy condition, the levels of employee participation in decision-making and control over working conditions will be higher and increase employee satisfaction and performance. Almuhsen et al.'s (2017) also found that nurses' perception of work environment characteristics was moderately high while the nursing foundation for quality of care and the nurse-physician relationship was the highest aspect of the work environment. Given that, Almuhsen et al. assumed that nurse administrators need to provide a healthy work environment and encourage

them to involve their staff in decision-making activities to be more confident. This approach can be useful mainly when nurse executives engage, guide, and teach nurse managers to empower their staff by creating a healthy work environment.

A better work environment was critical in influencing effective work engagement among employees. Abualrub, El-Jardali, Jamal, and Al-Rub (2016) examined the relationship between work environment, job satisfaction, and intention to stay at work and factors of intention to remain at work among nurses in underserved work areas. Abualrub et al. (2016) used a correlation design and a convenience sampling method survey through public hospitals and health care centers to collect 330 completed questionnaires, which is a response rate of 62% of the RNs and midwives. The study structure survey with some items taken from the Revised Nurse Working Index (NWI-R) to measure the work environment with a 4-point Likert scale. The authors' findings showed a strong positive relationship between the nurses' work environment and their job satisfaction level. Abualrub et al. (2016) and Asiret, Kapucu, Kose, Kurt, and Ersoy (2017) suggested that to increase nurses job satisfaction and retain nurses to stay will require organizations to create a culture of a supportive work environment, increase the quality of nurses care, and provide supportive leadership. The suggestion has been noted that leadership's negative effects can influence the work environment, nurse workforce with patient outcome. Operational efforts to improve poor work environments and nurses' job dissatisfaction levels were relatively challenging for some healthcare industries. Therefore, creating a stimulation positive work environment could increase employee work engagement that might lead to reaching organizational goals.

Positive perceptions of nurses' work environment may increase employees' levels of commitment and job satisfaction. Yoo and Kim (2017) and Huddleston (2014) found that a positive work environment enhances patient safety, patient outcomes, nurse outcomes, and organizational outcomes. Almuhsen et al. (2017) indicated that a positive work environment increases job satisfaction and lowers levels of burnout among critical care nurses, at the same time when staff is being recognized and complimented for their achievements that decreased turnover while enhancing organization commitment. This finding was consistent with a study by Cho, Chin, Kim, and Hong (2016) in that a positive nursing work environment tends to have higher levels of quality and patient safety, as well as fewer patient adverse events, which improve preventable patient outcomes. A positive work environment promotes positive attitudes within colleagues while increasing staff job satisfaction levels, commitment, and performances.

A healthy work environment plays a vital role in the performance of an employee. Ulrich, Lavandero, Woods, and Early (2014) studied 8,444 American Association of Critical-Care Nurses (AACN) to examine the current state of critical care nurses' work environments. The authors used a series of 62 questions in a three-part survey of the Critical Elements of a Healthy Work Environment scale, a series of additional questions to explore work environment elements, and questions about the participant and employing organization demographics with a Likert-type of 4-point response range from strongly disagree to strongly agree. Furthermore, Ulrich et al. found nurses' satisfaction was lower with the current position, with 21% of the nurses planning to leave their current position in the next 12 months. The results further showed that when nurses'

work environments are unhealthy, patients suffer (Ulrich et al., 2014). As a result, the anticipated incentive from a healthy work environment might motivate the employee to perform effectively while increasing productivity levels.

In the nursing work environment, job burnout and high-stress levels might affect nurses' performance, which may lead to a poor nurse-to-patient ratio. Shamian, Kerr, Laschinger, and Thomson (2016) examined the hospital-level work environment's impact on RNs' health indicators working in acute-care hospitals in Ontario, Canada. The study involved two types of instruments: the NWI-R (core survey) for the nurse to measure the work environment and Siegrist's ERI (Ontario survey) for the work environment's generic psychosocial. The study consisted of 160 acute-care hospitals in three hospital types (community, small, and teaching hospitals) with the individual nurse of 6,609. This study's results have shown nurses' work environments are not conducive to job satisfaction or a healthy workforce. Furthermore, the results indicated nurses with full-time position had poorer health outcomes and experienced job dissatisfaction than part-time nurses due to their workload, which increased burnout and sickness. Improving the nurse work environment may lead to less burnout and reduce job dissatisfaction while retaining nurses.

Working in a poor work environment in any organization may have major impacts on employees' productivity. Nurses who work in a poor work environment were likely to report negative outcomes such as a high level of burnout, dissatisfaction, and feeling less worthy than nurses who work in a better environment (Zhang et al., 2014). An unhealthy work environment results from poor leadership, poor communication, and lack of shared

objectives whereby may lead to nurses' dissatisfaction, high level of stress, as well as poor inter-professional communications (Palese, Dante, Tonzar, & Balboni, 2014; Rivaz, Momennasab, Yektatalab, & Ebadi, 2017). Also, employees who work in an unhealthy work environment were less likely to be excited about going to work and have a perception that the organization does not care about their well-being of working longer hours, as well as overwhelmed with a high workload (Rivaz et al., 2017). Consequently, nurses working in such an environment experience a high level of job dissatisfaction, which triggers nurses to start thinking about quitting their current job for another job, which may result in high turnover.

Developing a positive work environment will benefit both employees and the organization. Al-Hamdan, Manojlovich, and Tanima (2017) conducted a quantitative study with survey questionnaires to collect data from 650 RNs to examine associations among the nursing work environment, nurse job satisfaction, and intent to stay for nurses who practice in three hospitals in Jordan. The Practice Environment Scale of the Nursing Work Index (PES-NWI) was used to measure the nursing work environment with a 4-point Likert-type scale (strongly agree = 1 to strongly disagree = 4). The results showed a positive association between nurses' job satisfaction and the nursing work environment and the nursing work environment positively associated with nurses' intent to stay. The results further indicated that nurse perceptions of their work environment affect nurse outcomes. Given that, improving an unhealthy work environment will create a positive work environment, increase the job satisfaction and intent to stay, as well as less expensive, reduce the number of high personnel absenteeism while increasing

productivity levels in the organization (Al-Hamdan et al., 2017; Palese et al., 2014). For that reason, it is beneficial for hospital leaders to keep employees happy while retaining nurses from quitting or intention to leave the organization.

Due to the job dissatisfaction level, hospital leaders should take action to improve the poor work environment since poor work environments in the hospitals may be associated with nurses reporting job dissatisfaction and higher job burnout than nurses in a better work environment. Poor work environment settings are a critical issue that makes it difficult for nurses to perform their roles effectively (Cho et al., 2015). Managers should understand how nurses' poor work environment could affect nurses' intention to leave their job (Nantsupawat et al., 2017). To avoid nurses' intention to leave, the manager needs to take action and keeps a central role in creating and supporting a healthy work environment for nurses (Al-Hamdan et al., 2017). Therefore, hospital leaders may benefit from understanding the importance of developing a better work environment for employees as it pertains to increased job satisfaction levels and increased patient satisfaction with the quality of care received.

In healthcare organizations, the poor work environment's practical effects and labor changes are essential in hospital settings. They require permanent training to produce a healthy work environment and a positive vibe to increase employees' skills and satisfaction levels. Asiret, Kapucu, Kose, Kurt, and Ersoy (2017) showed that an unhealthy work environment was yet another reason for nurses' job dissatisfaction and an important cause of the nursing workforce's decrease that affects the performance of the nurse, patient care, and safety negatively. Plonien (2016) stated that an unhealthy work

environment contributes to turnover, which leads nurses to leave their positions or the nursing profession altogether to pursue another profession. Naveed, Hussain, Sarfraz, Afghan, and Waqar (2016) suggested managers or organizations need to create a more efficient system that would make employees happier and willing to report to work by empowering and improving their commitment to the organization through manipulating workplace structures. On that condition, work environments might improve from unhealthy to a healthy working environment, which promises to reduce nurses' job dissatisfaction and burnout for employees.

Improving the work environment from poor to better for nurses is challenging for healthcare leaders. Lake et al. (2016) studied nurses' work environment and reports of quality of care, safety, and patient outcomes using a cross-sectional method. Data collection took place between 2005 through 2008 with random samples of RNs license in four states (Pennsylvania, New Jersey, California, and Florida) to with the Practice Environment Scale of the Nursing Work Index (PES-NWI) to measure the work environment. Furthermore, Lake et al. (2016) noted that to improve the work environment, healthcare leaders would need these strategies for significant improvement, starting with a good quality of nursing care, physical resources, and communication skills to help lower job dissatisfaction, and decrease job burnout. Lake et al. (2016) found that a better work environment might help nurses increase parental visitation and satisfaction with care. The finding further shows that 66% of nurses were less likely to report fair or poor quality of care in their unit, and 80% less likely to report poor safety grades when comparing nurses in better work environments to poor environments. Therefore changes

in employees' work environments are vital, leading to improvements in RNs' ratings of patient care quality.

Management Support

Management support is an important role in organizations and can be a challenge for others to ensure the team's successful outcomes. Nurse Managers are often facing challenges due to an increase in workloads and stress. As a result, manager's stress level increases, which in turn affect the overall well-being of the work environment and unable to motivate nurses can cause both managers and nurses to experience job dissatisfaction that can lead to quitting their current employment (Labrague, McEnroe-Petitte, Leocadio, Bogaert, & Cummings, 2017; Udod, Cummings, Care, & Jenkins, 2017). However, few studies take into consideration potential connections in the relationship between nurses and manager job satisfaction. In addition to management support along with job dissatisfaction among nurses in hospitals setting, poor manager or lack of support from manager tend to produce job dissatisfaction of employees that lead to staff leaving their professional, which result in high employees' turnover (Tuckett, Winter-Chang, Bogossain, & Wood, 2015). Job dissatisfaction is common in today's healthcare workplace, mainly when there is a disconnection between the nursing staff and Managers. Therefore, providing a positive relationship with employees is important in the organization.

The lack of managers' support shows several motives, which drives nurses in the direction of intention to leave or dissatisfied with their current job. Such motives can be classified as a lack of support from managers, inability to be a team organization

objective, failure to show respect for a nurse, uncaring of the nurses' mission, as well as failure to understand the difficulties nurses face daily, which leads to them leaving their professional to seek for another career path (Tuckett et al., 2015). The perception of a lack of support from the manager is vital in any organization and should not be ignored due to its impact on the organization financially.

Management Support Measurement

Management support is beneficial to both employees and the organization.

Feather, Ebright, and Bakas (2015) conducted a qualitative to collect data through semi-structured interview questions with 28 RNs in hospitals with a minimum of 50 licensed beds to studied five focus groups from two community-based hospitals in the Midwest to explore the behaviors of nurse managers that most influence RNs' job satisfaction.

Feather et al. noted that nurse managers' behaviors play an important role in RNs' job satisfaction and retention. Feather et al.'s study results show a majority of nurses had job satisfaction due to supportive behaviors from their nurses' managers. These supportive behaviors consist of the following three themes of *good communication*, which promote trust. The manager listened to the RNs and responded appropriately while protecting their privacy by not sharing confidential information with others. The manager shows *respect* by being treating staff the same and holding the individual accountable. Also, *provide a feeling of being care* when the manager was aware of their personal needs while working. Organizations with good managers who adopt these three themes will certainly help increase employees' job satisfaction levels and retain employees.

Employee relationships with managers are important as it promotes benefits to the organization. Atefi et al. (2014) conducted a study to examine factors related to critical care and medical-surgical nurses' job satisfaction and dissatisfaction in Iran by using a convenient sample of 85 nurses at a large hospital with 856 beds. The author divided 85 nurses into 10 focus group discussions (FGs) for data collection purposes. The data collection was through audio tapes and note-taking to obtain full details from the FGs, where digital recordings were transcribed to create verbatim written accounts. Atefi et al. found that a non-supportive manager causes nurses' high levels of job dissatisfaction, which could also lead to an increase in patients' dissatisfaction and a decrease in the quality of nursing care. Studies have noted that nurse managers play an important role in nurses' job satisfaction and their decision to stay or intention to leave the organization (Asamani, Naab, & Ofei, 2016; Feather et al., 2015; Sojane, Klopper, & Coetzee, 2016). Therefore, managers should support nurses to help reduce job dissatisfaction levels and increase nurse-managers relationship.

Researchers have noted that managers may be another reason for turnover intention among nurses. Given that, it is important that nurse managers demonstrate good leadership skills, recognize nurses' hard work, be caring for staff, and provide support to nursing staff when needed (Chipeta, Bradley, Chimwaza-manda, & McAuliffe, 2016; Tuckett et al., 2015). When managers have transformational leadership skills, the behavior idealized, managers perceived will make subordinates understand the important aspect of their work by performing beyond their expectation toward achieving its goals and developing healthy work relationships (Aga, Noorderhaven, & Vallejo, 2016).

Transformational leadership in nurse managers are essential. It helps them recognize and appreciate staff efforts, reward good performance, promote good interpersonal relationships in the department, and ensure equal access to the opportunity available in the organization (Chipeta et al., 2016).

The manager has a significant role to play, such as offering problem-solving skills, encouraging, empowering, and motivating staff to think highly of their managers, which helps staff work together to accomplish projects (Aga et al., 2016). A study by Chipeta et al. (2016) showed that health workers' perceptions of poor managers could change positively through useful training to managers at all levels in the requisite skills, effective leadership skills, behaviors, communication, and most important, policymaker stepping in to assist when needed. Doing so would help managers form a positive example of a nurse-manager relationship supporting their staff's performance, motivating, encouraging, and promoting nursing satisfaction level, reducing turnover rate, and increasing organizations productivity.

In a hospital setting with a high turnover rate and job dissatisfaction among nurses, managers must possess positive personality traits, enabling them to approach conflict resolutions effectively to improve nurses' good work conditions in family and professional areas. At the same time, this management style would directly affect nurses' turnover intention by reducing the rate while increasing job satisfaction and increasing organizations' goals successfully (Banafti, Alavikolaei, & Esfajir 2016; Miltner, Jukkala, Dawson, & Patrician, 2015). In supporting this management styles, Thomas-Hawkins, Flynn, Lindgren, and Weaver (2015) noted that nurse managers are significant in the

organization to help strengthen patient safety and promote high-quality of care by empowering and motivating nurses to perform efficiently in a positive work environment and understand the important aspect of their work. As a result, nurse managers' support may increase nurses' job satisfaction level, hence increasing the quality of care for patients to be satisfied with their care.

Demonstrating good characters might promote a positive relationship between managers and employees and encourage employees to perform efficiently. Employees' satisfaction increases when the manager displays the characters of good behavior, be accountable, listens to employees' opinions, and shows personal interest in them (Feather, 2014). When RNs are dissatisfied with managers, employees tend to be dissatisfied in other areas (Aronson, 2005). For that reason, managers need to note their actions and attitudes to improve their skills and abilities to work with employees to improve their satisfaction level.

Promotion Opportunities

Promotional opportunities are factors that might lead to job satisfaction. Lacks of promotion opportunities have a stronger impact on employees resulting in job dissatisfaction and turnover among employees (Alboliteh, Magarey, & Wiechula, 2017). Promotions are an important factor when there are equal opportunities for promotion to satisfy employees that motivate employees for their professional growth in their career (Hashemi, Jusoh, Kiumarsi, & Hashemi, 2015). Studies show satisfaction with the promotion was another work-related predictor of turnover intent for nurses, and hence, dissatisfaction with promotion opportunities displays a stronger impact on employees'

turnover (Asegid et al., 2014). Therefore, the employer needs to show sufficient recognition of work for their effort and offer nurses equal promotion opportunities to motivate and increase staff's job satisfaction level while reducing depression among nurses.

Promotion Opportunities Measurement

Some researchers have shown unique aspects that affect employees' job satisfaction levels. Rubel and Kee (2015) studied a cross-sectional design method to examine the effect of the performance appraisal fairness and promotion opportunity on employee quitting intention with the mediating effect of organizational commitment. The data were collected from nurses who work in two large private hospitals in Bangladesh from January to February of 2014. A sample of 150 full-time nurses employed in different private hospitals to use in the study with a response rate of 33%. A 4-item scale was used to evaluate promotion opportunities with a 5-point Likert scale ranging from (1) *strongly agree* to (5) *strongly disagree*. Rubel and Kee found that promotion opportunities to be effective strategies for increasing nurse commitment while reducing their quitting intentions in the organization. Moreover, the research findings revealed that a better promotion opportunity was sufficient as it enhances the chances of receiving more salary, benefits, and an advanced position, which in return increases employees' job satisfaction level. To achieve employees' job satisfaction, hospital managers may benefit from recognizing the different competing factors that might help increase employee commitment.

The availability of job promotion opportunity was factor nurses consider as part of job satisfaction. The study of Rubel and Kee (2015) found that promotion was the “prize,” and a mechanism assuring the employee of gaining a better position within the organization. Moreover, the authors noted that promotion was the expansion of the position of an employee in the external environment to realize his worth in the internal environment. Saha (2016) and Hashemi et al. (2015) asserted that organizations would experience a positive relationship between promotion opportunity and job satisfaction among their employees as well as increase their performances. Therefore, hospital managers may benefit from making the promotion available for nurses, which could increase job satisfaction among employees and retention in the hospital.

Reducing promotional opportunities could negatively influence employees’ job satisfaction. Rubel and Kee's (2015) study indicated that promotional opportunities are another significant determinant of job satisfaction in organizations, enabling qualified nurses to take the most important role and decision-making to provide more support to nurses. Asegid et al. (2014) noted that individuals who perceive promotional opportunities tend to have a high level of satisfaction with their job because promotion is one of the motivating factors, effectively preventing dissatisfaction among employees while the employees value the promotion itself. In hospital settings, creating promotional opportunities for nurses into a managerial position may help the hospital management team derive a positive correlation with job satisfaction.

Job promotions are an important aspect of employees’ careers that may affect other facets of the organization's work experience. A study by Noor and Naseem (2015)

examines the job satisfaction of Ph.D. and non-Ph.D. faculty in both private and public sector in universities in Khyber Pakhtunkhwa of Pakistan. In this study, a field survey through a standard questionnaire was used to collect data to find the impact of job promotion and advancement on job satisfaction. The data consists of 94 employees sample size from 10 universities through the online sample size calculator. The author found that job promotion has a positive effect on job satisfaction and job advancement. The research findings of Noor and Naseem's study showed that non-PhD faculty had shown dissatisfaction with the job promotion than Ph.D. faculty due to long hours, salary package, and fewer chances for promotion in the organization. Hashemi et al. (2015) suggested that offering equal promotion opportunities to employees through the organization might help increase employees' job satisfaction while enabling employees to provide a high quality of work. Therefore, organizations should show more support and provide employees equal opportunities for advancement to retain their employees with a high level of job satisfaction, which may help increase performances.

Several facets influence job satisfaction might cause employees' attitude towards job turnover. Hashemi et al.'s study focused on equal opportunities for promotion for employees by investigating the level of employees' job satisfaction to determine the effect of gender on employees' job satisfaction. Hashemi et al. (2015) studied 316 employees, and 130 (23.6%) were male while 186 (45.4%) were female by using the 5-point Likert-type scale ranging from *very dissatisfied*=1, *dissatisfied*=2, *sometimes not satisfied or sometimes satisfied*=3, *satisfied*=4, *very satisfied*=5 to find the level of job satisfaction among the respondents. The data were collected from four 5 rate-star hotel in

Iran with a survey questionnaire. The research findings showed that employees were less satisfied with opportunities for promotion, which tend to affect their performance. The result further showed that if employers offer opportunities for job promotion and employees are aware of chances for promotion, employees will endeavor to put in their best to improve and promote their performance and behavior in the organizations. Therefore, taking the effect of both opportunities of promotion and job satisfaction levels among employees may help hospital managers understand the importance of promotions as a tool to help improve employees' attitudes and elicit more effort from employees.

Promotional opportunities can be major forms of boosting employees' motivation, passion for reaching higher, and morale. According to Nguyen et al. (2015), promotions have been serving as a motivation tool to be better than pay or bonuses because employees tend to prefer the promotion to a bonus, which appears to be an indicator of high social status and success in the organization. In addition, job promotion opportunities are yet another important extrinsic job quality that significantly impacts employees' lives and facilitates higher job satisfaction among employees (Ali, Edwin, & Tirimba, 2015; Getie et al., 2015). By doing so, employees believe there is potential for promotions that could put them in another position to make them more comfortable. As a result, it convinces the employees not to quit but to wait for the promotion. Asegid et al. (2014) and Rubel and Kee (2015) results aligned with a statement from Minbaeva, Pedersen, Björkman, Fey, and Park (2014) noted that promoting employees is one of the motivating factors that provide a strong motivation for employees to work harder and to meet the organizational goals. Therefore, it may help hospital managers recognize

promotional tools and see the value of job promotion to employees to accomplish promotional opportunities.

Employees with a lack of promotional opportunities were most likely to experience job dissatisfaction and think about quitting. Several researchers suggested that there was a significant impact between job satisfaction and promotional opportunities, which can affect employees and organizations directly and positively that may reduce job dissatisfaction levels and employees leaving the organization. Atefi et al. (2014) conducted a descriptive study to explore factors related to critical care and medical-surgical nurses' job satisfaction and dissatisfaction in Iran. The study composed a sample of 85 nurses from medical-surgical and critical care units with 856 bedsides located in Mashhad-Iran between March and June 2012. Data collection was through audiotape and note-taking from open-ended questions. Atefi et al.'s study indicated that a lack of promotion opportunities and continued education has contributed to major dissatisfaction among nurses, leading to poor quality of nursing care to patients in the hospital. The research findings further showed that when opportunities for promotion are absent, nurses tend to have lower job satisfaction than hospitals with opportunities for promotion. Getie et al. (2015) showed that promotion opportunities are important to the employees regarding providing them with an incentive whereby help keep employees work harder and motivate employees to commit to the organization. A study by Tsai, Horng, Liu, and Hu (2015) also noted that employees who see job promotional opportunities in the organizations are more likely to intend to stay with their current organization and feel more encouraged improving their skills and knowledge compared to employees who do

not notice any promotional opportunities. Providing job promotion opportunities in organizations may help reduce employees' job dissatisfaction and quitting improving employees' work performances and increase productivity, which might prevent the organization from losing important employees.

Turnover Intention

The relationship between job dissatisfaction and turnover intention was another research topic to discuss since numerous organizations are being affected. Al-Hussami, Darawad, Saleh, and Ahmed (2014) showed that nursing turnover was a challenge for nursing leaders because of its effect on health care costs. Several studies had been on the relationship between employees' turnover rates and organizational due to its impact on organizations. A study by Boamah and Laschinger (2016) further noted that the issues of high turnover intention among new nurses are a major concern to the organization due to the high costs it would have on the organization financially, affecting the patient care needs negatively. Turnover intention is an essential concern for healthcare leaders and nurses, whereby anticipated shortages could show significant effects and be overwhelming.

Turnover Intention Measurement

In organizations, turnover intention can create instability and disruptions in productivities. Wan, Li, Zhou, and Shang (2018) studied to assess turnover intention among experienced nurses through a cross-sectional design with 778 experience nurses from seven hospitals in March-May2017. Farh's turnover intention scale (1998) was used to measure participants' turnover intention in the study. Wan et al.'s study noted that

nurse turnover is a serious issue in health care firms and can negatively affect morale and cause the nurse's workload to increase. The research findings showed that 35.9% of experienced nurses had a high-level turnover intention, which causes nurses to leave their jobs. The result showed that high turnover among experienced nurses is costly because replacing professional nurses with inexperienced nurses is more expensive. The high turnover among nurses can impact an organization's ability to meet patient care quality due to cost, increased burnout and job dissatisfaction, and hospitals' efficiency (Bruyneel, Thoelen, Adriaenssens, & Sermeus, 2016; Wan et al., 2018). Therefore, to maintain a stable and undisruptive workforce, hospital managers may benefit from identifying factors to reduce nurses' job burnout, dissatisfaction, and turnover intention.

Several factors affect turnover intention and turnover. Kim (2015) examined factors related to employees' turnover intention to indicate the extent to which employees are inclined to leave their jobs using a 7-point Likert-type scale (1 = very disagree to 7 = very agree). The author initially measured turnover intention by using five items developed by Meyer, Allen, and Smith (1993) to exclude one object to improve the model fit. Kim (2015) indicated that turnover intention was higher among employees who felt less connected to their coworkers, less connected with their jobs, and sacrificed less to leave their current organization. Al-Hussami et al. (2014) also found that organizational commitment and quality of work for nurses are another factor that leads to employees' turnover intention. The reason for such turnover intention to occur is when nurses observed a negative relationship between organizational commitment and nurses and experience low job satisfaction with their work due to scheduling, workload, and

extrinsic rewards that might result in frustration and stress lead to a greater turnover intention. Therefore, identifying factors that affect nurses' turnover intention and turnover might help hospital managers create strategies that would increase job satisfaction and reduce frustration and stress levels.

Turnover rates among novice nurses are also another reason for the high turnover. Osuji, Uzoka, Aladi, and El-Hussein (2014) defined nurse turnover as “the process whereby nursing staff leaves or transfers within the hospital environment (or within the healthcare organization) (pg. 141-142).” This definition demonstrated that nurses choose to leave their job or nursing careers for a better job that would offer them an excellent opportunity to gain more respect and be rewarded for their hard work. Osuji et al. (2014) pointed out that nurses begin to feel dissatisfied with their job and career when nurses' roles are not well-defined, leading to a turnover. The increase in nursing turnover was causing the growing shortage of RNs and the big financial crisis in organizations, significantly impacting patient care quality in healthcare organizations. Therefore, awareness of nursing turnover might help hospital managers to develop plans to reduce turnover.

The turnover intention was a problematic situation in many organizations worldwide. Dawson, Stasa, Roche, Homer, and Duffield (2014) stated that turnover among nurses is a serious issue that can compromise patient safety, increase healthcare costs, and impact staff morale. Over several years now, researchers have linked data on new graduate nurse dissatisfaction and turnover intention variables to observe the drivers of high turnover rates among nurses in their entry-level or second year of employment

(Laschinger et al., 2016; Yu & Kang, 2016). Yu et al. (2016) used a cross-sectional survey method with a stratified sampling approach to collect data from nine regions of Korea consists of 443 new graduate nurses to examine factors affecting new graduate nurse turnover intention. The author measured turnover intention by using a 4-item scale that derived from the study by Lawler (1983) and was revised for nurses by Park (2002) into a 5-point Likert scale from 1 = totally no to 5 = totally yes, with higher scores which demonstrating a higher level of turnover intention. Yu and Kang noted that the turnover rate for a new graduate was high, which was more than twice the number of all nurses in South Korea. The research findings showed that new graduate nurses experience turnover intention due to the lack of need for more excellent nursing workforce management in the hospital. Manager's recognition of factors affecting new graduate nurse turnover might help reduce the consequences of lack of workforce management, nurses' schedule, and turnover intention.

High turnover among nurses was a complex problem that requires multi-facet solutions to assist healthcare organizations and minimize employee turnover. The increases in nurses' job dissatisfaction and turnover intention are becoming difficult mainly when an employee starts feeling the organization are not able to reach the highest capacity of personal job demand and provide good quality of patient care any longer (Al Mamun & Hasan, 2017; Bruyneel et al., 2016). As a result, that displayed a strong chance of nurses' feelings of dissatisfaction and disappointment, contributing to new graduate nurses' reality shock. It might lead to reported high rates of new nurse turnover (Osuji et al., 2014). Given the high rising turnover rates among nurses working in hospitals,

settings would imply high economic and human costs. Staff turnover has always been a concerning key issue facing many healthcare organizations regardless of their locations, sizes, natures of the business, and business strategies. As a result of that, the high turnover rates would have a more profound impact beyond financial and organizational dynamics since the psychological impact is crucial toward patient caring, which would lead to an increase in the hospitalizations phase among nurses when there are very high turnover rates.

Nursing turnover was a serious issue that compromises patient safety, increases healthcare costs, and influences staff morale. Park, Gass, and Boyle (2016) showed that turnover cost among nurses is a critical problem in hospital whereby cost approximately \$10,000 to \$64,000 to replace an RNs, which presents a challenge in organizations functionally. As a result, the turnover among nurses demonstrates a negative impact on healthcare organizations. The study by Banafti et al. (2016) and Rajan (2015) results aligned with the results of Yu et al. (2016) in that the high rate of employee turnover cost can also be the result of training and recruitment costs of nurses. Bruyneel et al. (2016) suggested that high turnover among nurses still received severe attention worldwide because of the high burnout, job dissatisfaction among nurses, and lower patient experiences. Thus, recognizing the issue that high turnover among nurses has in the organization may help managers mediate the subject to the hospital leaders, positively impact nurses and lower job burnout, reduce job dissatisfaction, and increase patient experience in the hospital.

Al-Hussami, Darawad, Saleh, and Hayajneh (2014) studied nurses' turnover intentions by examining the quality of work, demographic variables, organizational commitment levels, and health perception with a self-reported cross-sectional survey design. Al-Hussami et al. collected data from Jordan healthcare systems that consist of eight hospitals with three Jordanian hospitals stratified as a governmental, university, and private hospitals. The author measured the dependent variable of intention to leave the organization with three items following Mobley et al. (1977). The data involved 213 Jordanian RNs who agreed to participate between June 2011 and November 2011 with a self-reported questionnaire. Al-Hussami et al. found that younger nurses had a higher level of turnover intention than older. This result consists of Yu et al.'s (2016) study in which younger nurses want a more elevated position and salary due to their higher education. They also want to pursue better opportunities, mainly when their goals are not met, while older nurses are resistant to leave their current employer.

Job satisfaction levels and turnover intention are the major subjects of several researchers. Nei, Snyder, and Litwiller (2015) noted high turnover is a serious problem in healthcare organizations due to job dissatisfaction levels, which lead employees to think about quitting. Chinomona and Mofokeng (2016) study asserted that employee's dissatisfaction does lead to turnover intentions of them quitting their current job. The conceptual model was used in Chinomona and Mofokeng's study to further interpreting the relationship between employee job dissatisfaction and turnover intention that usually results in the state whereby employees will become subject to a "withdrawal cognition process." The authors showed that employees' decision to consider leaving their present

employment was probably due to job dissatisfaction, which results in an organizational turnover. Similar results have been found from the study of (Demirtas & Akdogan, 2015; Jehanzeb, Hamid, & Rasheed, 2015), which showed that when employees undergo job dissatisfaction that leads to thinking about leaving the organization and turnover intentions, new nurses left their positions due to a poor work environment that was discouraging, competitive and bullying. Chinomona & Mofokeng (2016) also noted that employees' perceptions of job dissatisfaction are shown to exhibit turnover intention, enabling employees to be more likely to leave their positions than those with high job satisfaction levels. Thus, considering these factors affecting nurses' job satisfaction levels might help retain nurses in the organization.

Turnover intention is a serious issue whereby employees choose to leave the organization or the organization fired employees, called voluntary turnover and involuntary turnover. Turnover is a painful issue with a significant challenge on company profits, and cause training and expatriation losses cost in any organizations (Getie, Betre, & Hareri, 2015; Saeed, Waseem, Sikander, & Rizwan, 2014). In healthcare industries, nurse turnover can have a negative impact on meeting patients' needs and the ability to provide good quality of care at the same time. Kim (2015), HariPriya, and Gunasundari (2016) indicated that nurse turnover had caused unhappiness for healthcare employers, mainly from those employees who felt less connection with their coworkers and did not feel the relationship with their jobs, and choose to sacrifice less to leave their current organization. According to Yang, Liu, Liu, and Zhang (2015), nurses' high turnover rate has negative economic consequences, lost productivity,

decreased efficiency, and lost human capital for work units and hospitals. A study by HariPriya et al. (2016) pointed out turnover is inevitable, and nurse's turnover intention is an important topic that needs special attention since nurses' high turnover affects hospitals' costs significantly and threatens the quality of health care and patient safety.

Turnover intention is the probability that employees will continue to face in the organization. Saeed et al. (2014) conducted a study to examine some of the factors that affect employees' turnover intention. The study consists of 166 questionnaires survey instruments, along with a descriptive research method. Saeed et al. revealed two types of turnover: voluntary turnover and involuntary turnover. Voluntary turnover is when an employee leaves the organization willingly due to the possibility of having an alternative best opportunity. In contrast, the involuntary turnover intention occurs when an organization is not satisfied with employee performance and decides to fire him or her. The research finding showed that when the employees are more satisfied with their job, they retain their entity, but if they are not satisfied, they leave the organization which counterpart when the employee's job performance is not good; it increases employees' intention leaving the organization. HariPriya et al. (2016) and Saeed et al. (2014) suggested that employees leaving or being fired cause monetary and structural stress on the organization, especially when the decision is voluntary turnover. Therefore, to reduce turnover intention, leaders need to ensure employees feel satisfied with their job and the organization.

Several studies have shown a correlation between job dissatisfaction and turnover intention. Unruh and Zhang (2014) showed that job dissatisfaction of newly licensed RNs

is a concern mostly when employees start to think about quitting after experiencing job dissatisfaction, being uncomfortable, and not committing to the organization, which results in turnover intention. The study showed that the impact of nurse turnover intention and top management needs to design effective strategies that would help healthcare industries overcome the high nurses' turnover intention by working to minimize the differences to make their employees more satisfied, which in turn would help reduce their turnover intention (Getie et al., 2015; Saeed et al., 2014). Also, Kuokkanen et al. (2016) studied newly graduated nurses (NGNs) to assess their empowerment and professional competence in the workforce. A descriptive, cross-sectional, and correlational design was used with data collection of 318 nurses in Finland between November 2011 and October 2012. Empowerment was measured through the 19-item Qualities of an Empowered Nurse scale, while the Nurse Competence Scale measured nurses' self-assessed generic competence. The items were rated on a 5-point Likert scale, ranging from 1 (totally disagree) to 5 (totally agree). The authors showed that nurse empowerment and professional competence was statistically significant because when NGNs are satisfied with their jobs and feel empowered, the probabilities of intent turnover decrease compared to those who are dissatisfied. Nurses are a vital component in healthcare organizations, and without nurses, the healthcare delivery system could be in jeopardy.

When employees are not satisfied with their job in the organization, they start thinking about leaving the organization to seek another job. Yang et al. (2015) and HariPriya et al. (2016) demonstrated in healthcare industries that the turnover intention is a huge problem that leads to an organizational crisis in term of economic costs, high

levels of job dissatisfaction, productivity loss, threaten the quality of care, patient safety, and system performance. As a result, healthcare leaders need to understand what triggers the high turnover intention among nurses by observing nurses' satisfaction and meeting patients' needs by providing quality care to reduce turnover intention (Getie et al., 2015). Nurses are indispensable and useful to healthcare organizations by providing quality care and achieving organizational goals.

Transition

The purpose of this study was to examine the relationship among the three independent variables of the quality of work environment, level of management support and opportunity for promotion, and the dependent variable nurses' voluntary turnover intention. The selected population will consist of employees working in the hospital setting for at least 1-year in the organization. In Section 2, the study will comprise a description of the program, purpose statement, role of the researcher, participants, research method and design, population and sampling, ethical research, instrumentation, data collection, data analysis, and the study validity. This study's findings may contribute to the business with positive social change by creating positive change for nurses to members of the community while increasing their job satisfaction, increasing productivity, and profit for the organization.

Section 2: The Project

In Section 2, I explain the study's purpose, which was to examine the impact of the three variables on nurses' intent to leave their job. I focus on whether job satisfaction and work environments, level of management support, opportunities for promotion lead to employee turnover. Additionally, I share my role as a research for this study. The research method and design were quantitative, and I provide a detailed rationale for the selected methodology.

Purpose Statement

The purpose of this quantitative correlational study was to examine the relationship among nurses' views of the quality of work environments, level of management support, and opportunities for promotion and voluntary turnover intentions. The independent variables were quality of work environment, level of management support, and opportunity for promotion, and the dependent variable was voluntary turnover intention to reduce attrition. The job satisfaction survey (JSS) instrument was used to measure the independent variables, while the turnover intentions scale (TIS) was used to measure the dependent variable. The target population was comprised of nurses with RNs status or BSN degree working in United States hospital settings. The implication for social change that may result from this research is promoting healthy work environments by nurse managers that may improve nurses' quality of care provided to patients. Improving nurses' work environments and patient care quality may improve patient quality of life, contributing to improved quality of life for families and communities.

Role of the Researcher

As a researcher, my role was to collect, validate, and analyze data from the study's target participants. The researcher's role in the data collection process of a quantitative correlational study focuses on valid data collection outcomes. The emphasis was on nurses' availability, the amount of time spent during the data collection period, and checking data for error and discrepancy. According to Schobel, Schickler, Pryss, Maier, and Reichert (2014), researchers should be highly flexible and have extensive interactions with the participants during the data collection period. Due to the COVID-19 pandemic, the survey could not be conducted at certain hospitals. I obtained IRB approval to collect data nationwide from nurses employed in hospitals in the United States via the online Survey Monkey platform. I collected data from nurses employed in hospitals in the United States to examine the relationship between the three independent variables that may significantly impact nurses' job satisfaction levels. I did not have a formal or informal relationship with the study participants. Erickson et al. (2015) stated that support from management with effective communication is vital during the data collection process. This study may contribute to hospital managers' understanding of factors that affect nurses' turnover intentions, which could improve individual quality of life when more nurses are satisfied with their job, which may lead to improved patient care.

My role was to conduct this study ethically. The Belmont Report protocol is used to protect and respect participants in the most ethical manner possible, mainly when research and clinical practices interconnect (Miracle, 2016). The Belmont Report applies

to this quantitative study because I conducted research that involves online recruitment and data collection from people. The Belmont Report describes the guiding principles of ethical research used to protect participants' rights in the research study. The three primary standards of the Belmont Report that help guide ethical research are (a) respect for persons, (b) beneficence, and (c) justice. Participants in this study knew that they (a) had the right to decide whether to participate in the research study, (b) understood that this study did not pose any harm to any participants, and (c) that participants were treated fairly and had equal opportunity to participate in the study. Therefore, I followed the procedure to maintain ethical standards throughout the research and summarize the data's statistical analysis in each variable's ethical manner with tables/charts (Kyvik, 2013).

Participants

The target population was comprised of nurses with RNs status or BSN degrees working in United States hospital settings. Criteria for participation consisted of nurses who were 18 years of age or older who had worked for at least 2 years in a hospital setting. The participants accessed the survey through the SurveyMonkey website; participants were invited to participate via social media postings on Facebook and LinkedIn, which contained a survey link and the informed consent form. I established a significant working relationship with the participants by sharing the survey link for data collection. The strategy for gaining access to the research participants was through social media postings with a description of the study and a SurveyMonkey link, which contained instructions and the informed consent form requiring participants to decide whether to participate in the research study before answering the questions.

SurveyMonkey is useful for providing participants with easier access and helping researchers avoid data coding errors, have reduced costs, save time, and export data in multiple formats (Varela et al., 2017).

Research Method

The quantitative method was suitable for this study for validating quantitative research instruments when measuring the concept and collecting data. The quantitative research method enabled me to examine the relationship between independent and dependent variables (Choy, 2014). The quantitative method is useful for examining the relationship between the variables by testing the hypotheses for reliable outcomes. The quantitative method was vital to this study to carefully examine the relationships between multiple variables (Onen, 2016). The quantitative method helps produce numerical data, such as percentages, enabling a researcher to perform statistical testing of hypotheses and deliver analysis results (Tarhan & Yilmaz, 2014). This process allows researchers to obtain a more in-depth and more comprehensive picture of the testable variables with descriptive statistical tests that would reveal the insights of independent variables on nurses' job dissatisfaction and turnover rates within hospital settings (Hussein, 2015).

Researchers use qualitative methods to collect data to gain an in-depth understanding of participants. Rust et al. (2017) indicated that the qualitative method employs nonrandom sampling that involves researcher-based interviews and observations to understand complex problems and poorly researched areas to preserve the context. Qualitative methods help researchers collect data through verbal or textual techniques by exploring peoples' thoughts or feelings (Vass, Rigby, & Payne, 2017). In addition, the

qualitative method contributes to achieving social validity to ensure that the interpretations of researchers reflect the realities experienced by the individuals and contexts studied (Kozleski, 2017). The qualitative method was not appropriate for this research study because it cannot examine the relationships between independent variables and dependent variables through statistical methods for analysis. Mixed-methods research involves both quantitative and qualitative methods. Shannon-Baker (2016) noted that mixed-methods research provides a more complex understanding of a phenomenon that would otherwise not have been accessible using one method alone. Researchers may use mixed-methods research for the general purposes of breadth and depth of understanding and corroboration, which might require extensive time, effort, and resources to conduct research (Almalki, 2016). While the mixed method has some advantages, a combination of quantitative and qualitative methods was not appropriate for this study, which was focused on determining statistically significant variable relationships.

Research Design

I used a correlational design for this study. There are four designs in quantitative research: (a) correlational designs, (b) descriptive comparative designs, (c) quasi-experimental designs, and (d) experimental designs. A correlational design was appropriate in this study to examine relationships between both variables in the same population. Brown, Lindell, Dolansky, and Garber (2015) showed that researchers could use a correlational design to examine the relationship between nurses' characteristics involving an employee's job satisfaction and dissatisfaction in hospital settings. Using a correlational design helps researchers evaluate relationships and clarify variables that are

significantly intercorrelated with the turnover intention and the size of that contribution while obtaining the best-fit equation for the testable variables (Armaghani, Mohamad, Hajihassani, Yagiz, & Motaghedi, 2016; Qabaha, Hassan, Mansour, Thanigachalam, & Naser, 2014). Curtis, Comiskey, and Dempsey (2016) asserted that a correlational design helps researchers interpret the data to determine if a relationship exists between variables and to determine the strength of that relationship. Therefore, a correlational research design was suitable in this study and enabled me to determine whether the quality of the work environment, management support, and opportunity for promotion predicted hospital nurses' voluntary turnover intention.

Descriptive, quasi-experimental, and experimental designs did not meet the purpose of this study. These three designs are used to focus on describing variables, cause-effect of variables, and causal relationships. Britton (2017) indicated that the descriptive design approach allows researchers to compare variables from different perspectives. Cook and Cook (2016) showed that the descriptive design describes the variables being examined but does not determine how variables relate to one another. Quasi-experimental and experimental designs were not suitable for this study because of establishing the cause-effect relationship among the measurable variables. Cook and Cook (2016) further showed that researchers can control the intervention with experimental research design but cannot examine the relationship between participants' outcomes. Researchers use a quasi-experimental research design to increase and improve evidence on causal effects when establishing causal relationships (Bärnighausen et al., 2017). Therefore, these three designs did not meet the requirement for this study.

Population and Sampling

This study population was comprised of nurses, ages 18 and older, who have worked for at least 2 years in hospital settings in the United States. I contacted participants via social media posts containing a description of the study and a link to the SurveyMonkey site containing the informed consent form and the survey questions. The participants were informed that their names and their employer's name would remain confidential during the survey process. I also obtained permission from the Walden University IRB to ensure all participants would be protected.

Selecting an appropriate population was vital. Martínez-Mesa, González-Chica, Duquia, Bonamigo, and Bastos (2016) asserted that a researcher might need to inspect and ensure the selected target population fits the study objectives or hypotheses to avoid nonresponses, which could affect the accuracy of the study's findings. As Mukhtar (2015) noted, selecting a predefined population could help select the sample population conveniently available to researchers. In this study, I adopted the predefined population to help with my choice of population. Determining the proper sample size is essential to generate a controllable data set that will guarantee the study's outcomes are precise and valid.

I selected nonprobabilistic using a convenience sampling technique. The nonprobability convenience sampling method helped me choose only nurses who suited this study's purpose. Etikan, Musa, and Alkassim (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. This method was appropriate for the study to offer the appropriate sample population for the research questions. Nonprobabilistic convenience sampling consists of both strengths and weaknesses. The strengths of nonprobability convenience sampling are: (a) inexpensive compared to probability sampling, (b) techniques require less effort with an online survey, and (c) time-effectiveness compared to probability sampling (Alvi, 2016). The weaknesses of nonprobability convenience sampling are: (a) unknown proportion of the entire population, (b) an inability to verify the accuracy of the variable and identify possible bias, (c) lower level of generalization from a sample drawn to the population (Alvi, 2016).

Researchers use a convenience sampling technique to gain access and collect data from participants in a convenient way. According to Murugiah and Akgam (2015), researchers use convenience sampling to determine the sample involved in research to avoid an imbalance in the selection population. Rahi (2017) noted that convenience sampling is a method that allows researchers to complete the collect data process with an easily accessible, least time-intensive, and most cost-effective population. Adopting convenience sampling in this study offered the advantage of obtaining many participants (Sá, Rocha, & Cota, 2016). Also, Hanaysha (2016) noted that the benefit of using convenience sampling is the ease of gaining access to respondents, cost-effectiveness, and better customer response rate. The convenience sampling method is useful for identifying valuable information sources relating to the hypotheses questions and providing helpful data information that would be valuable to the study (Barber et al.,

2015). Convenience sampling helps researchers obtain data from easily accessible participants without the difficulties of using a random sample.

The population sample size of 77 was calculated through the statistical program G*Power 3.1.9.2 version, a software used by researchers to determine the sample size required in the study (Heinrich Heine Universität Düsseldorf, 2016). An effect size of 0.15 is appropriate for measuring the strength of the relationship between the independent variables and the dependent variable. A 0.80 statistical power is suitable for determining if the relationship between the independent and dependent variables exists (Koppoe, 2018). In determining the sample size, I used an alpha level of .05, a power level of .80, a medium effect size of 0.15 to achieve a sample size of 77 calculated by G*Power. This sample size helped increase the strength and power of variable relationships. The results of the power analysis are included in figure 2.

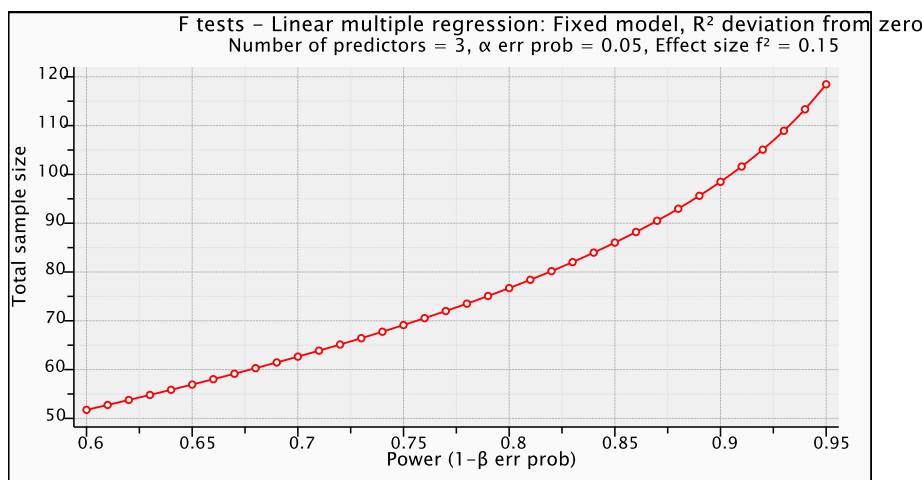


Figure 2. Power as a function of sample size.

G*Power is a statistical software package that helps researchers calculate different statistical tests, determine sample size, and present power analyses in a graphical method.

Faber and Fonseca (2014) noted that the appropriate sample size is essential and provides researchers with more efficient outcomes. Hoover and Nevitt (2016) asserted that when researchers have an insufficient sample size, that could lead to incorrect interpretation of the results. Faber and Fonseca (2014) further indicated that using minimal sample size in a study and the outcomes could undermine the internal and external validity of a study while very large samples could transform small differences into statistically significant differences. Using the correct sample size is vital, enabling researchers to detect an effect and find statistically significant evidence between variables.

Ethical Research

For this study, informed consent was provided to participants through social media posts with a SurveyMonkey link. The informed consent form is fundamental during a research study, and researchers must consider the ethical principles of justice, respect for autonomy, and beneficence with participants (Benito & García, 2016; Concanour, 2017). The Walden University Institutional Review Board (IRB) requires all doctoral students to obtain a certification from the National Institutes of Health (NIH) concerning protecting the dignity and rights of human study participants (Walden University, 2016). Obtaining IRB approval helped ensure the ethical protection of participants. I did not begin data collection in this study until receiving approval from Walden University's IRB (approval number 01-17-20-0398721).

Researchers are required to use informed consent to obtain permission from participants in the research study. Cocanour (2017) indicated that “informed consent is an ethical concept that is codified in the law and is in daily practice at every health care

institution” (p. 993). Providing the informed consent form allows participants to feel comfortable participating in a study based on their legal and ethical right to make an informed choice while allowing researchers to be a resource for information and resolve participant concerns (Farmer & Lundy, 2017). The informed consent form is required whenever a research study involves human subjects to inform the participants of their rights before deciding to participate in the study (Dooly, Moore, & Vallejo, 2017). Implementing informed consent in the research study is vital because participants would know about the study and assess the information given to them before deciding to participate.

The informed consent form provides participants with a choice to participate or not in the study. Harriss and Atkinson (2015) asserted that participants should know their right to participate or withdraw from the research study anytime without penalty. Participants in this study should be viewed as subjects and not objects with their right to ask questions about the research and withdraw from the study anytime without fear of retaliation (Bertram, Formosinho, Pascal, & Whalley, 2016; Wong & Hui, 2015). In this research study, participants have the right to ask questions about the research subject and may withdraw during data collection at any time without penalty by notifying me through telephone or email.

To be as ethical as possible, I followed the ethical principles through the informed consent process to provide guidance and confidentiality to participants and ensure this study brings no potential harm to participants. Vitak, Shilton, and Ashktorab (2016) indicated that protecting participants from harm includes protecting their identity during

the data collection process. Therefore, I ensured participants did not encounter any possible risks in their careers when responding to the survey by delinking participants' names from research data. Also, participants remained anonymous and provided an informed consent form to acknowledge before responding to the SurveyMonkey website survey.

The data collected from participants were only used to further this study. The data collected from participants will remain safe for a minimum of 5 years with assign password-protected to computerized records. I will ensure that all stored data are deleted and destroy from the computer's hardware/drive entirely after 5 years of keeping, and there would be no electronic data available. During the data collection period, if any participants decided to withdraw for some reason, they were free to exit anytime without penalty or explanation. The study participants were voluntary and did not receive any incentive to influence or benefit the study. For that reason, participants who were no longer interested in participating had the right to withdraw from the study by canceling the SurveyMonkey survey.

Data Collection Instrumentation

My primary responsibilities were to collect and analyze data for this quantitative study. The data consisted of the job satisfaction survey (JSS; see Appendix A) to measure the independent variables of employee job satisfaction, and the turnover intentions scale (TIS-6; see Appendix B) to measure the dependent variable of employees' intent to leave an organization. There was no modification to the JSS and TIS surveys used in this study. The job satisfaction survey is a survey that was initially developed by Spector in 1985 to

assess nine parameters of job fulfillment related to overall employee happiness (Spector, 1985). Roodt originally developed the TIS-6 in 2004 to examine employees' turnover intentions (Bothma & Roodt, 2013). I used SurveyMonkey to collect all my data. My request to use the JSS instrument and consent is included (see Appendix C & D). Also, my request to use the TIS-6 instrument and consent is located in Appendixes E and F.

Job Satisfaction Survey and Turnover Intentions Scale

Several authors noted that the JSS instrument has been effective in inspecting for reliability and validity. The JSS has 36-items with nine facet scales that use a 6-point Likert response with a scale ranging from 1 (disagree very much) to 6 (agree very much) to assess employee attitudes about their job. The following are the nine facet scales of job satisfaction that were created (a) pay, (b) promotion, (c) supervision, (d) benefits, (e) contingent rewards, (f) operating procedure, (g) co-workers, (h) nature of work, and (i) communication. The nine facets of JSS were designed to measure employee attitudes about their job and aspects of their job, such as management support, work environment, and job promotion. According to Spector (1985) and Spector (1997), the facet for pay measures employees' satisfaction with pay raises, pay fairly, chances for a salary increase, and organization appreciation. The promotion measures employees' satisfaction with promotion opportunities, chances for promotion, and promotion availability (Spector, 1985; Spector, 1997). The supervision facet measures employees' satisfaction with the employees' satisfaction with supervisors/managers' competence, fairness, interest, and likeability (Spector, 1985; Spector, 1997). The benefits facet measures employees' satisfaction with benefits received, comparing benefits received to other

organizations, a benefits package, and benefit availability (Spector, 1985; Spector, 1997).

I selected the TIS and JSS instruments for my study variables because TIS can examine the turnover intentions of employees (Bothma & Roodt, 2013), which would help to measure turnover intention of employees' intent to leave or stay with the organization, and JSS is useful determining levels of employee job satisfaction in this study (Spector, 1985).

The contingent rewards measure employees' satisfaction with rewards for good performance and the availability of rewards (Spector, 1985; Spector, 1997). The facet of operating conditions measures employees' satisfaction with rules and procedures, organizations' future, and quantity of work (Spector, 1985; Spector, 1997). The co-worker's facet measures employees' satisfaction with a colleague, being appreciated, and enjoy working with coworkers (Spector, 1985; Spector, 1997). The nature of work measures employees' satisfaction with the job being meaningful, the job's enjoyability, feeling a sense of pride doing the job, and the task performed of the job (Spector, 1985; Spector, 1997). The communication facet measures employees' satisfaction with organizational communication effectiveness, communication about organizational goals, and communication about appreciating employees (Spector, 1985; Spector, 1997). The JSS was appropriate in this study for measuring employees' level of job satisfaction. Students can use JSS for educational and research purposes, and it is available to download for free. However, before using the JSS, the student must request permission to use the JSS for their study.

The TIS-6 instrument contains 15 items and uses a 5-point Likert scale to measure turnover intentions (Bothma & Roodt, 2013). The revised TIS published later highlighted six items from the 15 items scales to assess the reliability and validity while measuring turnover intentions or predicting actual turnover (Bothma & Roodt, 2013). The six items of the TIS are (a) how often have you considered leaving your job?, (b) how satisfying is your job in fulfilling your personal needs?, (c) how often are you frustrated when not given the opportunity at work to achieve your personal work-related goals, (d) how often do you dream about getting another job that will better suit your personal needs?, (e) how likely are you to accept another job at the same compensation level should it be offered to you?, and (f) how often do you look forward to another day at work? (Bothma & Roodt, 2013). This instrument was appropriate for my study to measure the turnover intentions of employees who intend to leave or remain with a company.

Likert scales focus on numerical numbers, which assists researchers to calculate ordinal alpha that measures reliability more accurately as ordinal alpha (Subedi, 2016; Wu, & Leung, 2017). According to Bothma and Roodt (2013), the authors used a Cronbach alpha reliability coefficient ($\alpha = 0.80$) to demonstrate the validity and reliability of the TIS-6 scale. This study's population was based on employees in South African information, communication, and technology (ICT) sector company and are below middle management. The results on the TIS-6 showed that a significant difference in the turnover intention scores of employees ($n = 2429$) who resigned have ($M = 5.14$, $SD = 1.26$) compared to those who stayed ($M = 4.13$, $SD = 1.28$) with $t(170) = 5.20$, and $p \leq 0.001$ (two-tailed). The authors' results further showed that TIS-6 is a reliable and valid

measure to assess the turnover intention and predict actual turnover behavior among employees (Bothma & Roodt, 2013).

For the JSS instrument, Tharikh, Ying, and Saad (2016) used a population of secondary school teachers across Perak, Malaysia, to measure job attitude and organizational citizenship behavior that includes Job Satisfaction. The authors verified Spector's JSS have coefficient α for nine dimensions with the Cronbach's alphas ranging from a score of 0.60 for coworkers to 0.91 for the total scale, and a coefficient α of .70 for internal consistency. The results showed that the correlation between job satisfaction was ($r = 0.451$, $p < 0.01$, $M = 3.7$), and organizational commitment was ($r = 0.450$, $p < 0.01$) with organizational citizenship behavior that revealed a statistically significant and positive correlation. Researchers have used the JSS instruments to provide validity and reliability in several sectors about job satisfaction. Batura, Skordis-Worrall, Thapa, Basnyat, and Morrison (2016) noted the following dimensions of JSS: pay, benefits, coworkers and supervisors, promotion, work environment, and general job satisfaction to measure job satisfaction in organizations in human service, public and non-profit sectors. In this study, I used the JSS instrument to measure the independent variable of the work environment's quality based on how employees perceive and feel about their workplace. The JSS was also used to measure management support levels through employee perceptions of supervisor support and employees' relationships with supervisors/managers, such as competence, fairness, interest, and likeability. Finally, the JSS was used to measure the opportunity for promotion by measuring employees' perception of opportunities for promotion and promotion availability with the

organization's advanced position. The JSS is reliable among nurses at 0.89 with Cronbach's Alpha and showed good construct validity (Khamisa, Oldenburg, Peltzer, & Ilic, 2015). Also, Gholami, Fesharaki, Talebiyan, Aghamiri, and Mohammadian (2012) found that the validity and reliability of JSS were acceptable and ensured the reliability to be 0.86 using the Cronbach's Alpha method. Moreover, Spector's (1985) results displayed evidence for the scale's reliability and constructed validity with test-retest reliability with a coefficient alpha of .71. There were some adjustments or revisions with only the JSS and no adjustments or modifications with the TIS instrument during this study.

Data Collection Technique

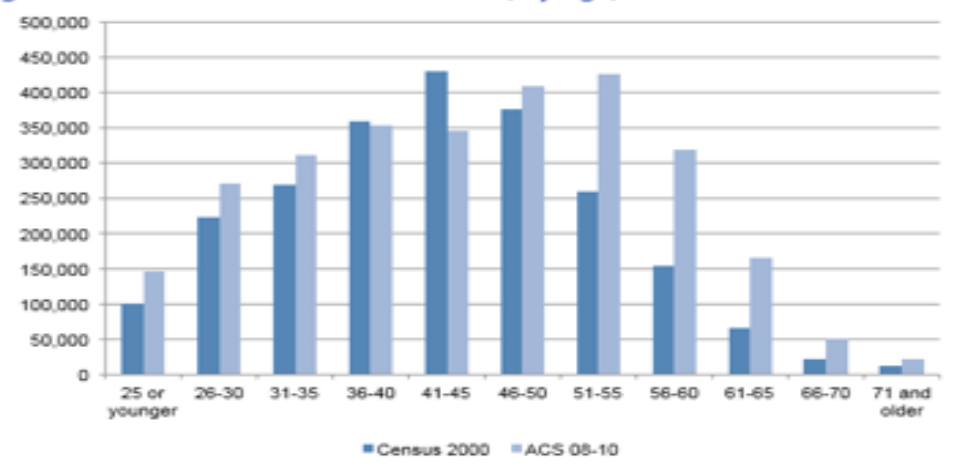
For this study, I collected my data through a self-administered online method with the SurveyMonkey database. The sample data was used to test the independent and dependent variables about nurses' job satisfaction in hospital settings. The survey consisted of 36 items of questionnaires with a 6-point Likert type scale. Participants in this data collection process were notified that the survey was confidential and voluntary. I chose to use the SurveyMonkey platform due to several benefits to researchers in today's technology world. Technology is essential in today's business world by serving various functions, making research study easier than before. Cuff (2014) noted that technology allows different avenues of collaboration to occur during the research process that would not have been possible or convenient for researchers to locate or gain access to the digital database for information without technology. Cuff (2014) further asserted that technology increases the number of skills and literacies needed to complete the research study and

increases the research steps' efficiency to make the final product effectively. Therefore, using the SurveyMonkey will (a) enable a researcher to read the total number of survey questionnaires completed quickly, (b) allow a researcher to distribute the questionnaires to participants with easy access to complete the questionnaires, (c) help a researcher financially with the lower data collection costs, (d) offers a researcher a faster response and feedback, and (e) helps a researcher to have fewer time limitations and not to spend the whole day trying to get people to complete the questionnaires (Varela et al., 2017).

There are several advantages when using the online survey data collection technique versus the paper survey method. According to Ho (2014), the online survey allows participants to complete questionnaires through a desktop computer, smartphones, or computer tablets with a good response time. Also, compared to other data collection methods such as face-to-face and telephone interviews, the online survey approach is more convenient for participants to respond to the survey, quickly reach more participants, and reduce error measurement error while providing more reliable data (Khazaal et al., 2014). The online survey's other advantages would be participants being anonymous without their name or company's information being disclosed. Also, online data collection is inexpensive due to not paying to print and use postal services to distribute questionnaires. Moreover, it helps with time management and allows a researcher to obtain the data quickly and analyze without having to type all the responses into excel, which reduces data entry error (McPeake, Bateson, & O'Neill, 2014; Roster, Lucianetti, & Albaum, 2015).

One disadvantage of using an online survey is for participants who are older than 75 years of age who cannot access the survey application or use online frequently would not be able to complete the questionnaires compared to the face-to-face interview survey process (Horevoorts, Vissers, Mols, Thong, & Van de Poll-Franse, 2015). With an online survey, some participants might be sensitive to questions, which could trigger them to start thinking about the potential repercussions of disclosing the information. Also, those without Internet access would not participate in this online survey, reducing the amount of responding rates (Bandilla, 2016). According to the U.S. Nursing Workforce (2013), the RN population's aging slows as nurses get older (See below figure 3). Also, American Nurse Today noted that some nurses are over 70 years old and are still in the workforce.

Figure 10. Counts of RNs in the Workforce, by Age, in Five-Year Increments



Data Sources: HRSA analysis of the ACS 2008-2010 three-year file and Census 2000 Long Form 5% sample

Figure 3. RNs workforce.

A pilot study was not necessary. Dikko (2016) noted that a pilot study is useful when researchers need to pre-test research instruments to detect possible potential

problems in the measurement instrument before collecting data. Hazzi and Maldaon (2015) indicated that a pilot study is necessary when researchers use a small sample size method instead of a large sample size to identify data, normality, and reliability, requiring some modifications of the main study. In this study, the questionnaire instruments that I selected have been validated and reliable in the previous research studies; therefore, a pilot test is not required in this study.

Data Analysis

This study examined the impact of the 3 variables on employee intent to leave the job. There was a focus on whether job satisfaction and work environments, level of management support, opportunities for promotion lead to employee turnover. This study's research question was the following: What is the relationship among quality of work environment, level of management support, an opportunity for promotion, and nurses' voluntary turnover intention? The hypotheses of this study are as follows:

H₀: A significant relationship does not exist among the quality of work environment, level of management support and opportunity for promotion, and nurses' voluntary turnover intention at hospitals.

H_a: A significant relationship does exist among the quality of work environment, level of management support and opportunity for promotion, and nurses' voluntary turnover intention at hospitals.

In this quantitative correlational study, I used a statistical analysis of multiple linear regression to examine the relationship between quality of work environment, level of management support, and opportunity for promotion with nurses' voluntary turnover

intention at the hospital. I chose multiple linear regression to test the hypotheses and to analyze data. Oguntunde, Lischeid, and Dietrich (2018) indicated that multiple linear regression is a statistical method for estimating the relationships between at least two independent variables and one dependent variable. Therefore, employing multiple linear regression will enable me to obtain better estimates with improving precisions on the variables. Because this study contained more than one independent variable, multiple linear regression was appropriate to provide various statistical estimates of outcomes to analyze their correlation. Abdullah and Leong (2018) asserted that using multiple linear regression helps researchers to examine the strength of the relationship between independent variables (predictors) and dependent variables (predicted).

Brooks and Barcikowski (2012) indicated that multiple linear regression is useful when a researcher is studying a large population to ensure stable coefficients, test the hypotheses, and decide what size relationship is necessary for statistical significance with the multiple correlation coefficient, R^2 . In multiple linear regression, R^2 measures the independent variables and the goodness of fit to show how close the data fitted the regression line. Wang, Nguyen, and Tran (2014) indicated that the multiple correlation coefficient, R^2 value range from 0 to 1 to measure the strength of the linear relationship between variables. Wang et al. (2014) further noted that when the R^2 value is +1, a perfect positive linear relationship exists and when R^2 is -1, a perfect negative linear relationship exists, and when R^2 equal to 0, no linear relationship. Multiple linear regression is suitable for this study to examine the strength and relationship between variables.

According to Jeon (2015), regression is a statistical method that enables a researcher to assess the relationship between independent variables (more than one variable) and the dependent variable (only one variable). Pandiarajan, Kumaran, Kumaraswamidhas, and Saravanan (2016) also noted that regression analysis enables researchers to execute the prediction values and forecasting of the testable variables while investigating the strength of their relationships. Performing regression analysis in this study is essential and would help to (a) identify which independent variable has a more significant effect on the dependent variable, (b) provide insight on the relationship between independent and dependent variables, and (c) allow for precise estimating of the dependent variable based on the changes in the set of independent variables (Jeon, 2015).

For this quantitative correlational study, a multiple linear regression method was used to examine whether the relationship between the quality of work environment, management supports and opportunity for promotion, and nurses' voluntary turnover intention exist. As noted by Jeon (2015), multiple regression analysis is useful when examining the correlation between testable variables to display a variable's effect while controlling other variables. Multiple regression allows a researcher to develop a reliable estimate, provide an exact, practical formula for the variables by calculating the percentage of the variance between independent and dependent variables, and perform the outcomes (Najafi & Kong, 2015).

The statistical analysis of ANOVA was not appropriate for this study. This study examined the correlation between the independent and dependent variables. According to Bejami, Gharavian, and Charkari (2014), ANOVA compares the mean square and shows

whether a difference exists between the two or more groups. ANOVA also allows researchers to assess which factors significantly impact the other groups by comparing the sample means (Zafar, Hasan, & Tyagi, 2015). ANOVA's objective was to measure the differences between group means, while this study examines the relationship between variables. The independent *t*-test was also not suitable for this study. Nguyen, Kim, Rodriguez de Gil, Kellermann, Chen, Kromrey, and Bellara (2016) found that an independent *t*-test was known to be "the most powerful test for mean differences." According to Kim (2015), the use of an independent *t*-test compares two groups independent of each other and makes an intergroup comparison of changes between the two groups. The independent *t*-test was not appropriate for this study because I did not compare two groups but rather examined variables for a single group, and the dependent *t*-test was suitable for this study.

Data cleaning and screening procedures help a researcher identify incomplete and unreasonable data that are not relevant to the study (Hashem et al., 2015). I cleaned and screened data by inspecting all the incorrect data in the dataset and filtering the unnecessary and missing data and data discrepancy before analyzing the data. According to Cai and Zhu (2015), data cleaning helps detect and remove data errors, missing information, inconsistencies, and noise from data to be better. To clean data for the quantitative method, a researcher would use the data quality assessment and monitoring techniques to obtain information with more intuitive and concrete features, which will provide accurate and reliable data (Cai & Zhu, 2015). For this study, I cleaned and screened for the quality of data to ensure better data reliability.

Missing data in a quantitative study is a critical concern because any missing data can significantly change the total effective sample size and the results (Cheema, 2014). Studies have shown there are two methods a researcher can use to handle missing data. The first method is the listwise deletion method, which is useful for discarding an entire record of missing data from analyzing one or more variables of interest. Still, this method can also result in a loss or reduce the statistical tests' power, mainly when the sample dataset is small. This method is also known as a complete case analysis due to deleting all the missing data with null value while retaining only the complete data (Cheema, 2014; Lin, Lan, Huang, & Wang, 2015). The second method is pairwise deletion, which exclusively focuses on removing specific missing data from the analysis of variables that involve a statistical procedure; this method is useful when dealing with a small sample size dataset (Cheema, 2014). I addressed missing data in this study by adopting a data cleaning and screening method to validate that missing data do not count as a variable in the observation. Some missing value ends up being replaced by a single value variable. Therefore, I manually removed any survey with missing data, such as an incomplete survey or one in which a participant skipped a question. I did not use listwise and pairwise deletion methods in this study.

Williams, Grajales, and Kurkiewicz (2013) noted that within multiple regression analysis, there are several assumptions about the statistical analysis that a researcher should test: (a) normality, (b) multicollinearity, (c) homoscedasticity, (d) independence of errors, and (e) outliers. These assumptions can either result in Type 1 or Type 2 errors if they are not met.

The assumption of normality is useful if a researcher ensures that the random variables are generally distributed to avoid a violation that could lead to biased standard errors and reduce the test's estimated efficiency. Multicollinearity assumption is a correlation between two or more independent variables. This assumption can lead to inaccurately estimated coefficients if there is less severe multicollinearity, which would cause the standard errors and confidence interval to be overestimated. The violation of multicollinearity can be corrected using ridge regression to reduce standard errors. The homoscedasticity assumption refers to the finite variance that is constantly around all the predictor variables' regression levels. This assumption is useful for researchers to apply scatterplots to show residuals variance (Williams et al., 2013). Parrinello et al. (2015) noted that an outlier is an observation point of standard deviation that is the distance from the mean difference because of a nonanalytic error-related process.

The assumption of independence errors tends to display biased estimates of standard errors and significance when the errors are normally distributed. Independence of residuals would enable researchers to check the assumption and use clusters rather than random sampling and ensure that a change in the mean that affects serial correlation does not violate the assumption of independence errors (Williamset al., 2013). If this assumption is violated, researchers must perform a time-serial model test for correlation, look at the residual time series table, investigate autocorrelation errors by calculating, and do autocorrelation function to correct the violation (Williamset al., 2013). Identifying outliers during regression analysis is crucial because the outliers' trend pattern in multivariate data is still a challenging problem for researchers due to the data labels,

which the outlier in the data trend pattern tends to pull toward and away from the other dataset (Cao, Lin, Gotz, & Du, 2018; Green & Salkind, 2016). The assumption of an outlier is that several nonparametric methods in outliers are designed to search for low-density objects and arbitrary distributions for comparing the relative outliers of the data items (Cao et al., 2018). Checking for outliers, I used scatterplots generated from SSPS to look for the shape and skews of the trend to determine if any threats exist.

In this study, I interpreted inferential results through confidence intervals and Pearson's product-moment correlation coefficient to demonstrate if the relationship of testable variables were due to the real effect and not by the sampling error. The confidence intervals are known as a range between two numbers that help a researcher determine which effect sizes are substantial and whether they are comparable with the data (Greenland et al., 2016). The confidence intervals would further assist a researcher in ensuring whether the size of the interval's effects contains the real effect or not by testing the hypotheses and presenting their P-value (Greenland et al., 2016). The Pearson's product-moment correlation coefficient r measures the linear dependency between two random variables to determine the strength of a relationship (Ly, Marsman, & Wagenmakers, 2018; Mohamad Asri, Hashim, Mat Desa, & Ismail, 2018). The R-values from Pearson's product-moment correlation coefficient range between -1 and 1 and demonstrate the correlation's strength or level of significance. An r-value of 1 represents a perfect positive linear relationship, and -1 means a perfect negative linear relationship between variables. However, both are valid only if the F-statistic demonstrates the alternative hypothesis is confidently accurate. This value allows a

researcher to indicate the effect sizes between variables by looking at the coefficients between 0.8 and 1, which means a strong correlation, coefficient between 0.5 and 0.8 means medium correlation, coefficient less than 0.5 indicates a weak correlation. A coefficient close to 0 shows a lack of correlation between testable variables (Mohamad Asri et al., 2018).

For this study, I used the Statistical Package for the Social Sciences (SPSS) software version 25 to perform my analysis. The SPSS software package consists of helpful tools that will enable me to generate different statistical tests, graphs, output with standard deviation (SD), mean, and other useful elements to analyze this study. From the SPSS software, I was able to test for bivariate correlations to examine the relationship between my variables and the strength of each independent variable. In this study, I used multiple linear regression to analyze my data with SPSS software to determine if there is a correlation between the quality of work environment, level of management support and opportunity for promotion, and the dependent variable of nurses' voluntary turnover intention exists. The F-statistic in multiple linear regression enables the researcher to examine if a significant correlation exists, which subsequently answers the research question (Li, Yao, Dai, & Song, 2018).

The SPSS software was appropriate because this was a quantitative study. According to Tang and Ji (2014), SPSS software is most useful when a researcher conducts quantitative research to analyze quantitative data efficiently. SPSS is useful with different types of analyses available for a researcher to explore and transform data into the business world that helps with decision-making. The SPSS will allow a

researcher to understand and interpret the data; perform testing to show the relationship between employees' job dissatisfaction and their voluntary turnover intention in this study.

Study Validity

Threats to statistical conclusion validity in a quantitative research study are crucial, and researchers should investigate the issues that affect the validity of inferences (Madeyski & Jureczko, 2015). According to García-Pérez (2012), there are two types of threats to statistical conclusion validity. The first threat to statistical conclusion validity occurs when the data do not match the characteristics of the design used during the data collection. The data cannot logically give better outcomes to the research question in the study. The second threat to statistical conclusion validity happens when a proper statistical test is used. The state risk probabilities are altered under a condition that will fail to be incorrect with the declared probability of Type-I and Type-II errors.

Poor design and sample size can affect the Type-I error rate due to lack of proper planning on the statistical test, which fails to be corrected with the assumed probabilities of Type-I and Type-II error rates. To address the threats, a researcher would need to implement a sequential procedure with control of Type-I error rates by performing repeating statistical testing called composite open adaptive sequential test (COAST) and optional stopping rule to correct the issue. This procedure would test the p-value with the low criterion at 0.01 and the high criterion at 0.36. To ensure that the Type-I error rate is in control, a researcher would need to examine if the test yields $p < 0.01$ or $p > 0.36$. If $p < 0.01$, a researcher should stop data collection and reject the null, but if $p > 0.36$, the

data collection would stop and cannot reject the null instead, collect more data and re-test (García-Pérez, 2012).

Some factors contribute to statistical conclusion validity, and I will discuss the following three factors (a) reliability of the instrument, (b) data assumptions, and (c) sample size. The reliability is known for the study results' consistency, and Cronbach's alpha was used to determine the instrument's internal consistency (Nogueira & Fernandez, 2018). Cronbach's alpha can range from .30 to .90 with the lower and higher value that indicates the instrument's reliability. Nogueira and Fernandez (2018) noted that a value lower than .60 indicates the instrument has a low internal consistency, and the conclusion of the result could be incorrect. Still, when the value is higher than .60, it indicates the instrument's reliability can produce stable and good internal consistency of the variables and can be acceptable. The Cronbach's alpha method is useful for ensuring the instrument is valid and reliable through this alpha categories $\alpha < .30$ is very low, $.30 \leq \alpha < .60$ is low, $.60 \leq \alpha < .75$ is moderate, $.75 \leq \alpha < .90$ is high, and $.90 \leq \alpha$ is very high (Nogueira & Fernandez, 2018).

The second factor is the data assumptions. Data assumptions of multiple linear regression are vital in any research study. They should always be tested to ensure data distribution's normality and a linear relationship between the independent and dependent variables. Williams et al. (2013) stated that testing of data assumptions of multiple regression is necessary, and researchers should always test these two areas: (a) that the assumption of variables is normally distributed, and (b) the assumption of a linear relationship between variables when measurement error is uncorrelated. During a

research study, misinterpretations about data assumptions are likely to happen, and researchers should inspect the assumption by using a complete diagnostic method such as the Durbin-Watson statistic that would test for autocorrelation in the sample and note if the assumption is satisfied (Barker & Shaw, 2015).

The sample size is the third factor, which is vital in a research study to confirm it is suitable for regression analyses and necessary to assess covariates' effects in the study. During a research study process, sample size plays an essential role in determining that N = (number of participants) would be sufficient to provide information to interpret the purpose of the study continuously (Malterud, Siersma, & Guassora, 2016). According to Fritz, Cox, and MacKinnon (2015), statistical power in a research study is critical for testing the probability of rejecting the null hypothesis when the null hypothesis is falsely using the Type-I error rate, the sample size, and the effect size. The sample size is significant when making inferences about a population from a sample. This is because the larger the tested sample size, the better the precision as well as; the increase in the sample size would decrease the standard error of the mediated effect, which in turn increases the power level to detect the effect size (Biau, Kerneis, & Porcher, 2008; Fritz et al., 2015). The sample size in a quantitative research study is vital when measuring the observation and estimate the effect size because it enables researchers to control the risk of reporting false-negative findings or producing an estimate of precision on what the study will create (Biau et al., 2008).

Transition and Summary

In summary, this was a quantitative study conducted to examine the relationship between independent variables of the quality of work environment, level of management support and opportunity for promotion, and the dependent variable of nurses' voluntary turnover intention. In Section 1, I included (a) an overview background of the problem, (b) problem statement, (c) purpose statement, (d) nature of the study, (e) research questions, (f) an outline theoretical framework, (g) operational definitions, (h) assumptions, limitations, and delimitations, and (i) significance of the study. Section 2 comprised the restatement of the purpose of the statement with the following subcategories (a) role of the researcher, (b) participants, (c) research method, (d) research design, (e) population and sampling, (f) ethical research, (g) instrumentation, (h) data collection technique, (i) data analysis, and (j) study validity. Section 3 will include (a) presentation of findings, (b) application to professional practice, (c) implications for social change, (d) recommendations for action, (e) recommendations for further research, (f) reflections, and (g) conclusions.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The purpose of this quantitative correlational study was to examine the relationship among three independent variables the quality of work environment, level of management support (both intrinsic job satisfaction), and opportunity for promotion (extrinsic job satisfaction) and the dependent variable of nurses' voluntary turnover intention. I collected data from nurses who reside only in the United States and currently worked in a hospital setting. In this section, I present the quantitative correlational study results, how the findings apply to professional practice, the implications for social change, recommendations for action, recommendations for further research, and a reflection of my experience during my DBA doctoral study process. The findings indicate that the combination of intrinsic and extrinsic job satisfaction has a statistically significant relationship, $F(3, 78) = 7.29, p = .000, R^2 = .219$, which predicts nurses' voluntary turnover intention. The $R^2 (.219)$ value indicated that 22% of the nurses' voluntary turnover intention variance was accounted for the linear combination of employees' intrinsic and extrinsic job satisfaction. Furthermore, the work environment's intrinsic job satisfaction was the only statistically significant predictor ($t = 4.598, p < .000$).

Presentation of the Findings

In this subsection, I discuss testing assumptions (normality, multicollinearity, homoscedasticity, and independence of error), variables' reliability, descriptive statistics, inferential statistical results, and interpret the findings of the theoretical framework, and

conclude with a concise summary. I selected a correlational design to examine the impact of the three variables on employee intent to leave the job. There is a focus on whether job satisfaction and work environments, management support, and opportunities for promotion lead to employee turnover. I collected data through the SurveyMonkey platform using questionnaires from the JSS and the TIS-6. I used SPSS software Version 25 to analyze the data and obtain the statistical analysis. Cronbach's alpha was calculated to assess the reliability of the variables (Table 2). The JSS uses a six-point Likert-type scale, and within JSS, 19 items required reverse scoring, where 1 indicated participants who "agreed very much" and 6 showed that participants "disagreed very much." These were negatively worded items for which participants' agreement indicates dissatisfaction. Cronbach's alpha illustrated that all variables reflected good reliability because they are in the magnitude range between .70 and .90, which shows that the relationship between the variables is high (See Table 2).

Table 2

Reliability Statistics for Study Constructs

Variable	Cronbach's alpha
Intrinsic–work environment	.818
Intrinsic–management support	.789
Extrinsic–opportunity for promotion	.865
Turnover intention	.880

Tests of Assumptions

SPSS software was used to test and assess the assumptions of multicollinearity, normality, linearity, outliers, homoscedasticity, and independence of residuals. To

conduct this test, I used the normal probability plot (P-P) of the regression standardized residuals (Figure 3) and the scatterplot of the standardized residuals (Figure 4).

Multicollinearity. I examined multicollinearity by viewing the tolerance and variance inflation factor (VIF) among intrinsic job satisfaction and extrinsic job satisfaction (predictor variables). Table 3 shows the multicollinearity values of the independent variables and indicates the assumption of multicollinearity was not violated since the values below 1.0 are acceptable tolerance values and the variance of inflation values less than 5 show no violation of multicollinearity (Yu, Jiang, & Land, 2015). The results indicated that because the value for a variance of inflation is 1.0, there is no correlation between variables, and multicollinearity would not be problematic (see Table 3).

Table 3

Multicollinearity Statistics

Variable	Tolerance	VIF
Intrinsic–work environment	.961	1.040
Intrinsic–management	.969	1.032
Extrinsic–opportunity for promotion	.985	1.015

Outliers, normality, linearity, homoscedasticity, and independence of residuals. I examined the existence of outliers through the normal probability plot (P-P) of the regression standardized residuals (Figure 4), the scatterplot of the standardized residuals (Figure 5), and a histogram (Figure 6) to test for outliers. The test revealed there were no significant violations of linearity, homoscedasticity, and normality. In Figure 4, the assumption of normality was evaluated by viewing the normal probability plot among

the residuals and predicted values. The residuals' results fall near a perfect linear distribution around the fit line, indicating no violations of these assumptions.

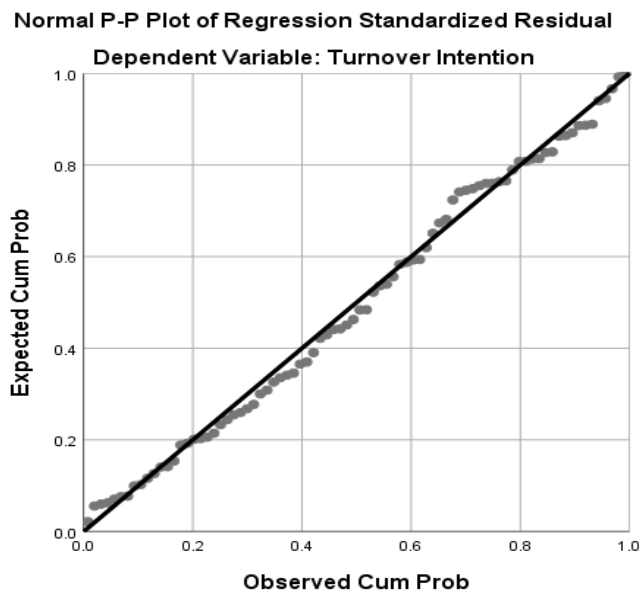


Figure 4. Normal probability plot (P-P) of the regression standardized residuals.

The scatterplot in Figure 5 shows the existence of heteroscedasticity, indicating variances between the residuals and predicted values. The scatterplot did not show a systematic pattern in the standardized residual values' scatterplot, meaning that no assumption violations exist because the data points fall within the area, and there is no issue with the assumption (see Figure 5).

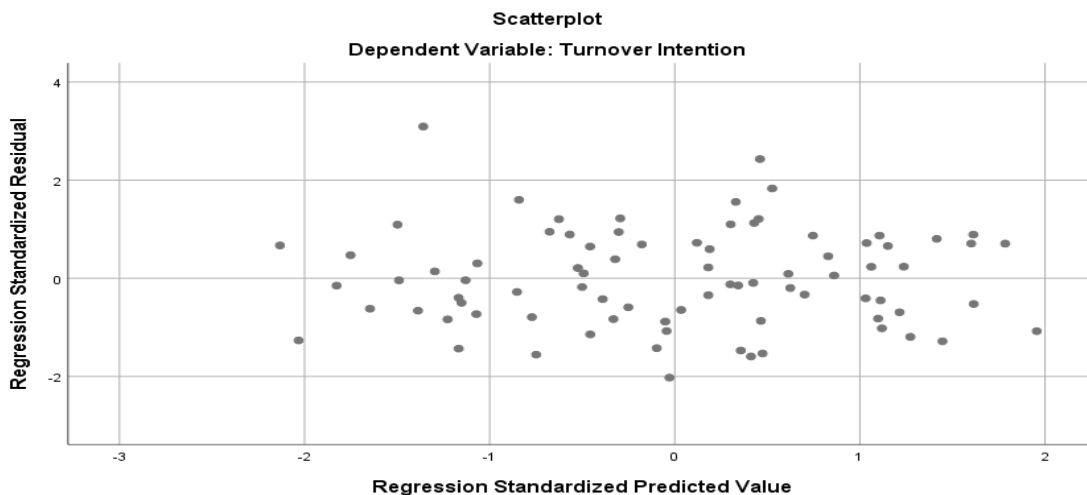


Figure 5. Scatterplot of the standardized residuals.

To test for outliers, I used a boxplot (Figure 6) that illustrated that turnover intention and intrinsic–work environment indicated no outliers. Intrinsic–management support indicated one outlier: 36 and extrinsic–opportunity for promotion indicated one outlier: 31. The identified outliers did not affect the results of the study. The results showed that management support has a lower quartile while the work environment has a higher quartile (see Figure 6).

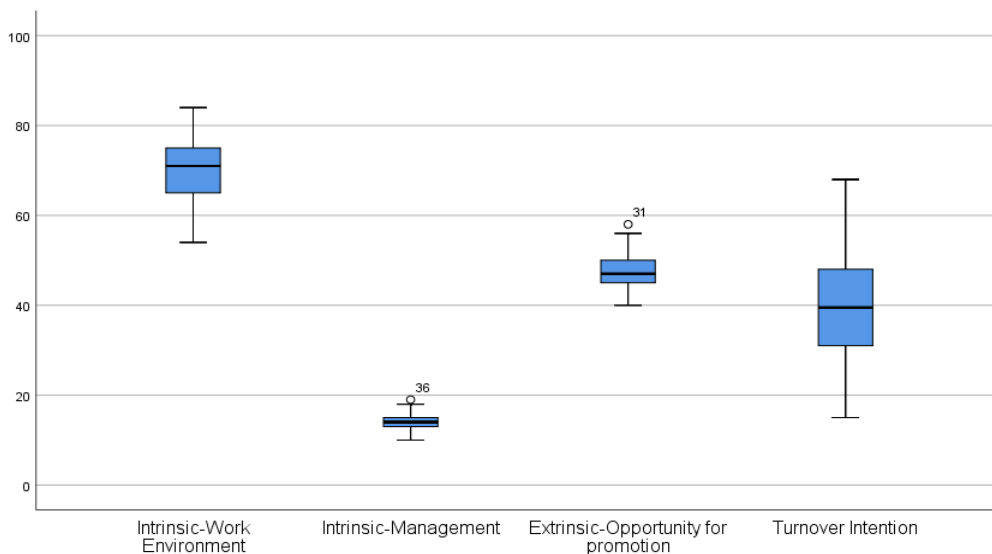


Figure 6. Boxplot of outliers.

Descriptive Statistics

In total, I collected 83 surveys. I excluded one survey because of missing data, resulting in 82 records for analysis. This study's appropriate sample size was 77, calculated through the statistical program G*Power Version 3.1.9.2, which is software used by researchers to determine the sample size required in a study (Heinrich Heine Universität Düsseldorf, 2016). Table 4 shows the descriptive statistics of the independent and dependent variables. The results indicated that an average of the work environment was 70% ($M = 70.05$, $SD = 7.21$), which means there is a stronger relationship of work environment among other independent and dependent variables when looking at the standard deviation compared to management support of 15% ($M = 14.26$, $SD = 1.75$), which demonstrates the weaker relationship among other independent and dependent variables. The results revealed a significant relationship between work environment and nurses' turnover intentions. (See Table 4.)

Table 4

Means and Standard Deviations for Predictor and Criterion Variables

Variable	Mean	SD	N
Turnover intention	39.66	11.790	82
Intrinsic–work environment	70.05	7.206	82
Intrinsic–management support	14.26	1.748	82
Extrinsic–opportunity for promotion	47.39	3.851	82

Table 5 shows the descriptive statistics for baseline demographic variables. Of the 82 participants, 71 (86.6%) were women, and 11 participants (13.4%) were men. For the age category, the highest percentage was 45.0% for ages 30–39, and the lowest percentage was 6.1% for ages 60–69 (see Table 5).

Table 5

Descriptive Statistics for Demographic Variables

Variable	Frequency	Percent
Gender		
Female	71	86.6
Male	11	13.4
Age		
18–29	10	12.2
30–39	37	45.1
40–49	21	25.6
50–59	9	11.0
60–69	5	6.1

Note. N = 82

Inferential Results

I conducted a multiple linear regression analysis, $\alpha = .05$ (one-tailed), to examine the relationship between intrinsic job satisfaction, extrinsic job satisfaction, and nurses' voluntary turnover intention at hospitals. The three independent variables were the quality of work environment, level of management support, and opportunity for promotion. The dependent variable was the nurses' voluntary turnover intention. The null hypothesis stated that a significant relationship does not exist among the quality of work environment, level of management support and opportunity for promotion, and nurses' voluntary turnover intention at hospitals. The alternative hypothesis stated that a significant relationship does exist among the quality of work environment, level of management support and opportunity for promotion, and nurses' voluntary turnover intention at hospitals. I analyzed the data to determine if the assumptions of multicollinearity, outliers, normality, homoscedasticity, and independence of residuals were satisfied; and show no violations of the assumptions existed. The model was able to

significantly predict nurses' voluntary turnover intention, $F(3, 78) = 7.29, p = .000, R^2 = .219$. The $R^2 (.219)$ value indicated that approximately 22% of the total variance in nurses' voluntary turnover intentions was accounted for by the linear combination of the predictor variables (employees' intrinsic job satisfaction and employees' extrinsic job satisfaction). In the final model, the work environment's intrinsic job satisfaction was the only statistically significant predictor ($t = 4.598, p < .000$). Therefore, the null hypothesis can be rejected and stated that a significant relationship does exist among the work environment and nurses' voluntary turnover intention at hospitals (See Table 6).

Table 6

Regression Analysis Summary for Predictor Variables

Variable	B	SE	β	t	p
Intrinsic–work environment	.768	.167	.469	4.598	.000
Intrinsic–management	–.076	.686	–.011	–.111	.912
Extrinsic–opportunity for promotion	–.323	.309	–.106	–1.047	.298

Note. $N = 82, df = 3$ at 95% CI

Analysis summary. This quantitative correlation study aimed to examine the relationship among the quality of work environment, level of management support and opportunity for promotion, and the nurses' voluntary turnover intentions. Standard multiple linear regression was used to examine the three independent variables of intrinsic job satisfaction and extrinsic to job satisfaction to predict the value of nurses' voluntary turnover intentions. Assumptions surrounding multiple regression assessed with no serious violations existed, as evidenced. I also conducted the Kolmogorov-Smirnov and Shapiro-Wilk test of normality to reveal only the Intrinsic – Management Support variable to be significant. This test demonstrated that management support (.002)

was significantly deviated from a normal distribution compared to the other independent variables (See Table 7). I further used additional tests to determine normality (Figures 7 through 14 and Table 8), representing all four variables' normal distribution. Data distributed in a normal Q-Q plot shows all data points close to the diagonal line. The normal Q-Q plot results indicated that the data were normally distributed because the data closely lay on the straight line and have a linear pattern, which showed a strong positive linear correlation between the variables (See Figures 8, 10, 12, and 14).

Table 7

Test of Normality

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Turnover intention	.068	82	.200*	.987	82	.598
Intrinsic–work environment	.082	82	.200*	.981	82	.275
Intrinsic–management support	.186	82	.000	.948	82	.002
Extrinsic–opportunity for promotion	.089	82	.161	.978	82	.173

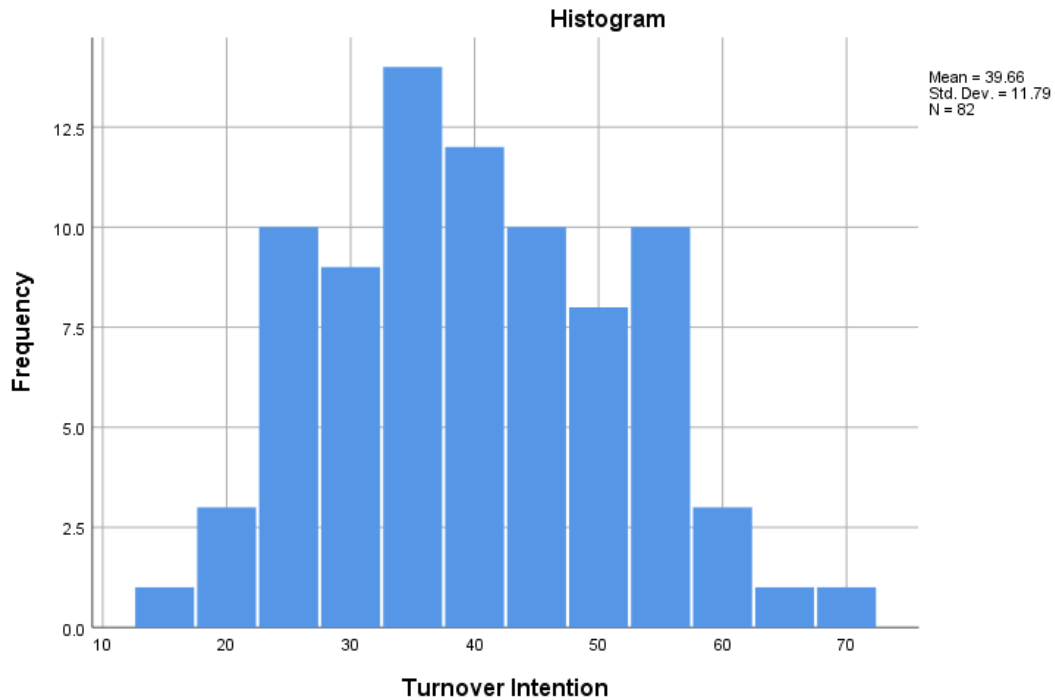


Figure 7. Histogram of turnover intention.

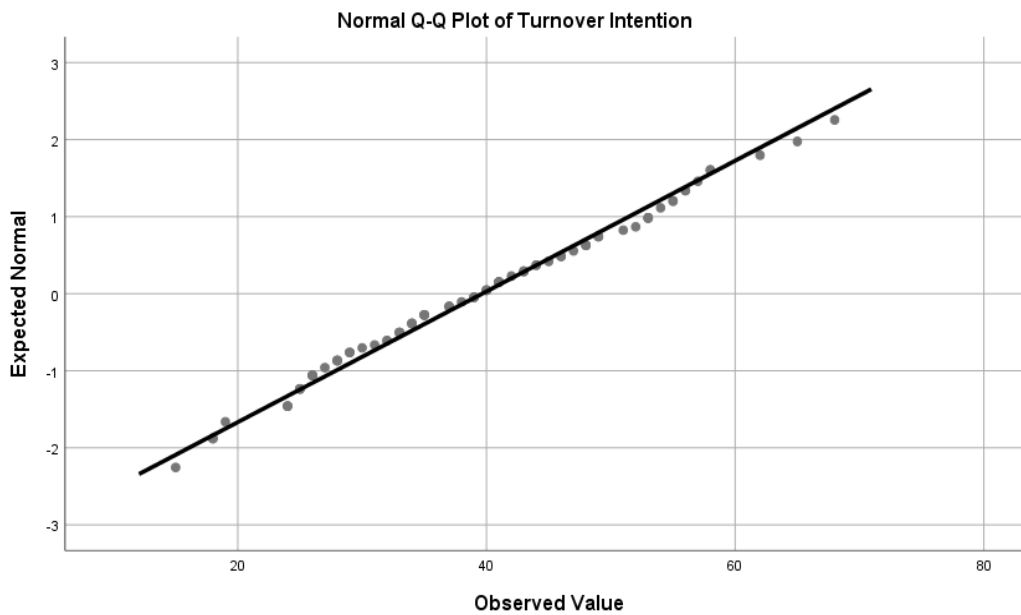


Figure 8. Normal (Q-Q) plot of turnover intention.

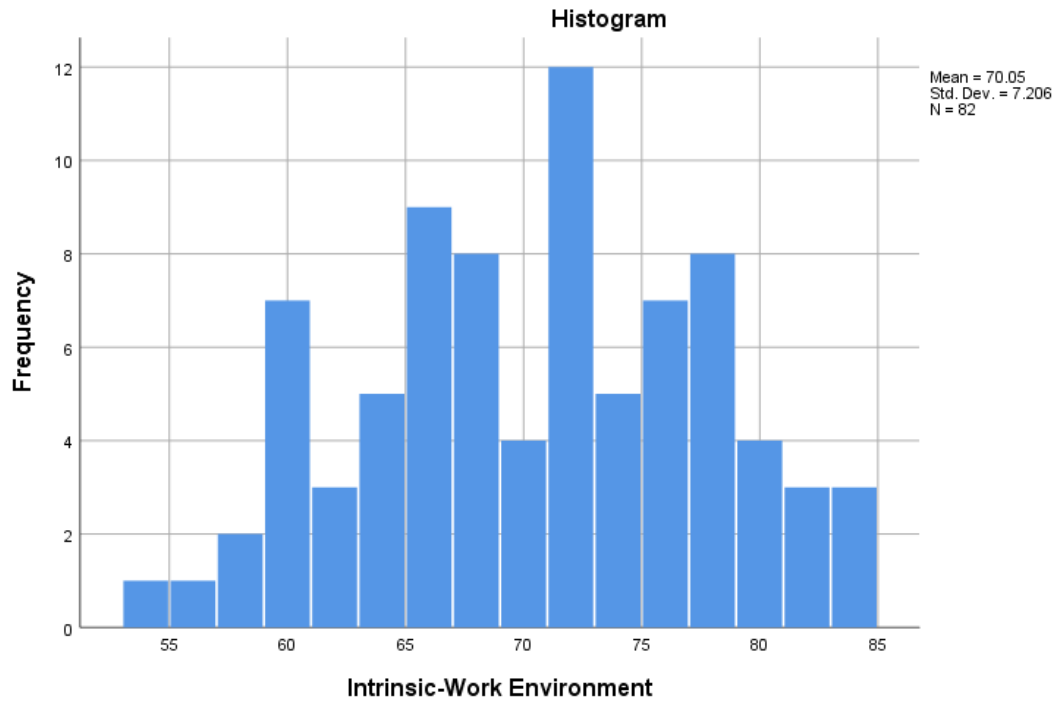


Figure 9. Histogram of intrinsic–work environment.

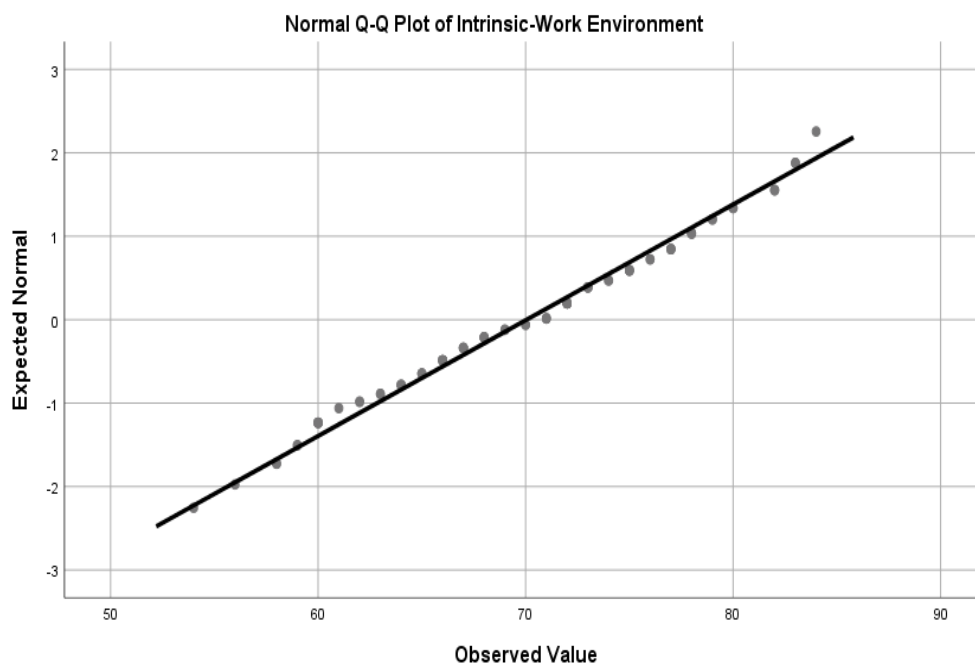


Figure 10. Normal (Q-Q) plot of intrinsic–work environment.

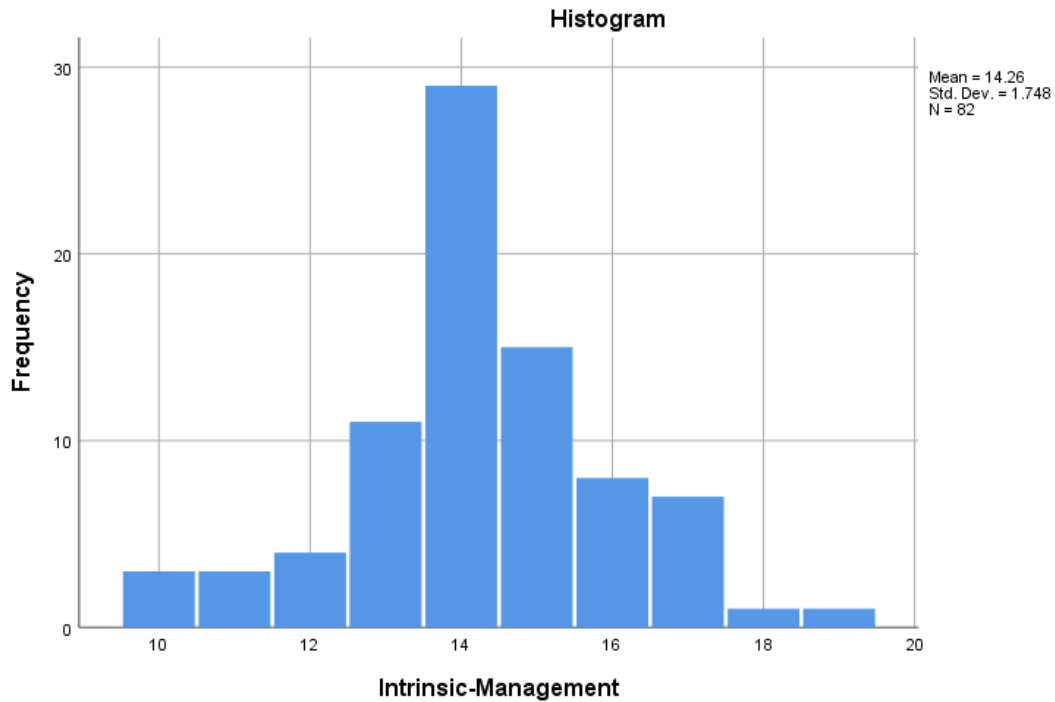


Figure 11. Histogram of intrinsic–management support.

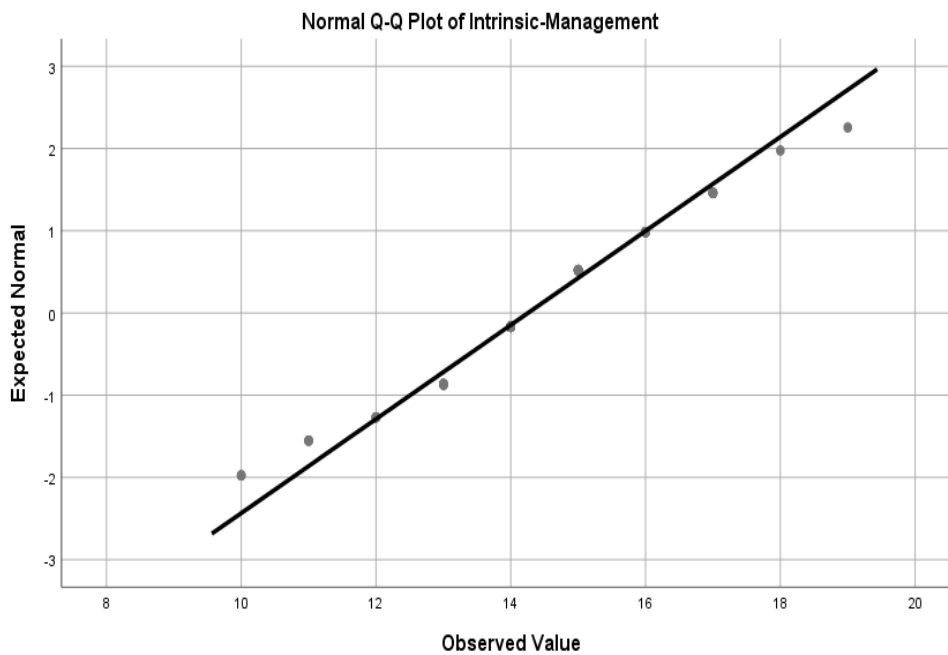


Figure 12. Normal (Q-Q) plot of intrinsic–management support.

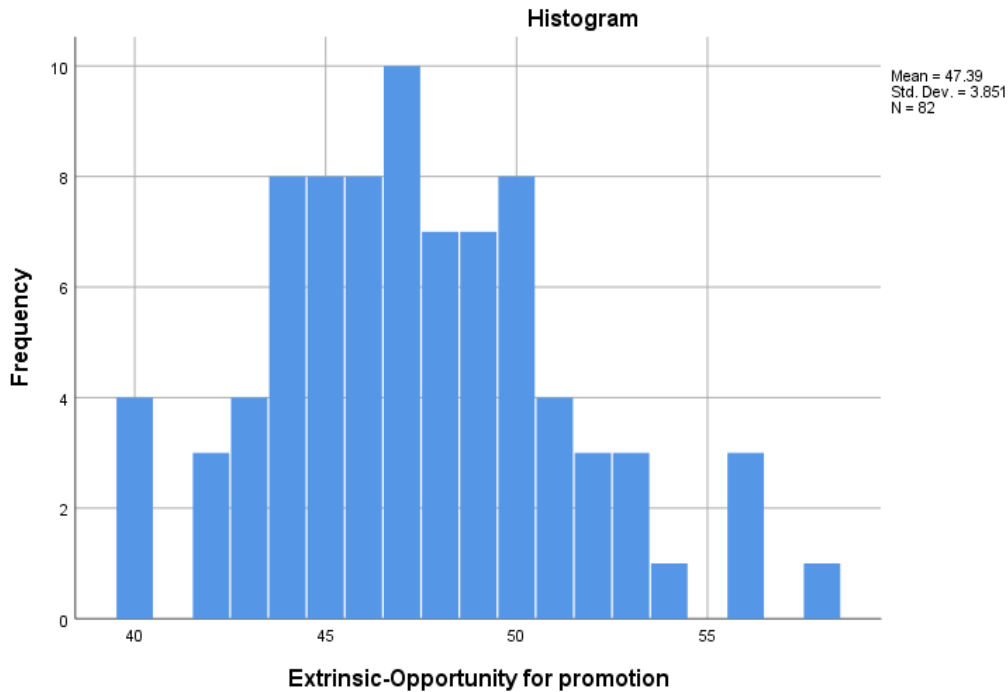


Figure 13. Histogram of extrinsic-opportunity for promotion.

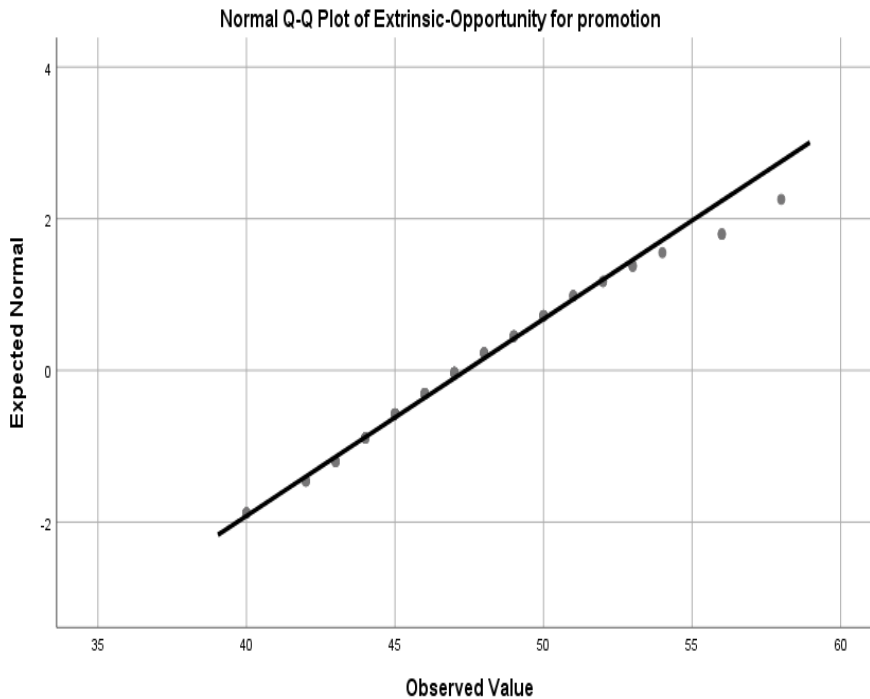


Figure 14. Normal (Q-Q) plot of extrinsic-opportunity for promotion.

Table 8

Skewness and Kurtosis Descriptive

Variable	Skewness	Kurtosis
Turnover intention	.144	-.576
Intrinsic–work environment	-.070	-.766
Intrinsic–management support	-.120	.629
Extrinsic–opportunity for promotion	.380	.136

Note. N = 82

As a whole, the model was able to significantly predict nurses' voluntary turnover intention, $F(3, 78) = 7.29$, $p = .000$, $R^2 = .219$. Both employees' intrinsic job satisfaction and employees' extrinsic job satisfaction provided useful predictive information about turnover intention. This analysis concluded that a linear combination of intrinsic and extrinsic job satisfaction predicts nurses' voluntary turnover intention, and intrinsic job satisfaction of the work environment ($t = 4.598$, $p < .000$) was significantly associated with employee turnover intentions.

Theoretical discussion of findings. The theoretical framework of Herzberg's motivation-hygiene theory (1959) results was consistent with other research findings related to turnover intentions decreasing when employee job satisfaction increases. For example, Chandra (2016) asserted that an effective supportive work environment affected job satisfaction and positively impacted employee performance, ensuring high-quality care. Similarly, the findings from the current study supported Herzberg's (1959) motivation-hygiene theory in the premise that employees who work in a positive and healthy work environment are more satisfied compared to employees that work in a poor work environment within their organization (Almuhsen et al., 2017).

My research findings show that not all factors have an equal impression on turnover intention. However, several extrinsic and intrinsic factors were associated with nurses' job satisfaction. Herzberg reasoned that when job satisfaction factors increased, employee turnover decreased. Given that, healthcare organizations should try to improve the situation of nurses' work environment, level of management support, and opportunity for promotion, which might result in satisfying coworker relationships among workers, enhance performance, and the level of job satisfaction that might have potential improvements in patient quality of care (Alam & Asim, 2019). I concluded a statistically significant relationship existed among the quality of work environment and nurses' voluntary turnover intention at hospitals.

Applications to Professional Practice

I conducted this quantitative correlational design study to examine the relationship among nurses' views of the quality of work environments, management support, opportunities for promotion, and nurses' voluntary turnover intentions. From a business perspective, this study applies to healthcare professional practice and may contribute to practical ways of business by assisting managers with developing effective methods to support employees and create a stable relationship while working together to reach organizational objectives and reduce nurses' voluntary turnover intentions. Nurses have a vital role in improving patients' quality of care and safety; therefore, a decrease in high job dissatisfaction would improve the quality of work environment, increase the level of management support, and create more job promotion opportunities for nurses that could help leaders prevent nurses from thinking about leaving their current position. This

study will help health care leaders to adopt strategies that can increase nurses' job satisfaction and decrease job dissatisfaction levels while preventing or reducing nurses' voluntary turnover at hospitals.

This study's findings indicate that not all employee motivators lead to nurses' voluntary turnover intention outcomes. Study findings showed that the null hypothesis was rejected with the work environment's intrinsic job satisfaction because there is a significant relationship between the work environment's quality and nurses' voluntary turnover intention at hospitals. Creating a better nurses' work environment could enhance employee job satisfaction, increase employee wellbeing, work engagement, perceived quality of care, and decrease employee turnover intention (Al Sabei et al., 2020). Furthermore, this quantitative research study's findings may help leaders and managers in hospitals focus their effort on retaining highly skilled and highly experienced nurses.

Implications for Social Change

Implications for positive social change include promoting healthy work environments resulting in improved quality of care provided by nurses, enhanced patient care that may contribute to improved quality of life for the patients, their families, and the community. This study may contribute to positive social change by providing excellent care in a hospital setting, which improves patient outcomes and provides a valuable resource to enhance entire communities through increased education, awareness, and health. Helping healthcare leaders understand the factors that produce poor perceptions of nurse manager support and job dissatisfaction among nurses may generate positive social change by creating healthy work environments where employees engage more, leading to

a high level of job satisfaction and improved productivity in the organization (Cummings et al., 2018).

Improving the healthcare settings and enhancing patients' healthcare experiences may result in positive social change for the community served by that healthcare organization. Social change may occur through an organizational focus on employee relations with a better understanding of the intrinsic and extrinsic factors that motivate employees to stay in their organization. The resulting reduction in the nursing unemployment rate may result in positive relationships between the employees, their families, and their communities. A partnership between organizational leaders and local communities may further provide social impact, financial benefits, and a better quality of life for the patients in the communities.

Recommendations for Action

This study focused on examining the relationship among nurses' views of the quality of work environments, management support, opportunities for promotion, and nurses' voluntary turnover intentions. This study's findings are essential to leaders in healthcare industries, and I recommend healthcare leaders adopt strategies to focus on factors that increase nurses' job satisfaction and reduce turnover rates. The approaches identified in this study would be necessary for healthcare business leaders to use and improve job satisfaction, work environment and reduce voluntary turnover of nurses. Job satisfaction is essential because it is a significant factor in nurse retention in healthcare organizations (Laschinger & Fida, 2015). The challenge of keeping employees satisfied with their job can be problematic for any organization. Therefore, top leaders in

organizations should implement strategies to improve nurses' job satisfaction and reduce nurses' voluntary turnover intention. These strategies may include employee support programs and adequate support staff, such as housekeeping and administrative personnel.

This study's findings provided evidence that the work environment's intrinsic job satisfaction was the only significant predictor of nurses' voluntary turnover intentions. Healthcare business leaders need to focus their attention on improving the employee work environment that might help lower job dissatisfaction, reduce intention to leave and burnout (Nantsupawat et al., 2017). Organizational leaders also need to focus on a strategy to retain nurses in the hospital setting by improving the nurse work environment, which may significantly affect the nursing shortage by decreasing job dissatisfaction.

This study's results will be beneficial to any healthcare industry interested in increasing job satisfaction and reducing voluntary turnover among nurses. Therefore, I plan to share my study findings through scholarly journals and other healthcare business publications and publish this study in the ProQuest/UMI dissertation database to help distribute the results to a broader audience.

Recommendations for Further Research

This study focused on examining the relationship among nurses' views of the quality of work environments, management support, opportunities for promotion, and nurses' voluntary turnover intentions. Future research could be conducted in narrower geographic areas and outside the United States. These studies might help examine further what efforts healthcare leaders in these other facilities and geographic regions are using to help support nurses perform effectively, increase job satisfaction, create a healthy work

environment, create promotional opportunities, and reduce nurses' turnover rate. A second recommendation would be to expand the testable hypothesis to include other variables that might significantly impact nurses' job satisfaction and turnover intention. A further research option would be to perform studies using different instruments to measure the independent variables. Additional variables, such as compensation, career advancement opportunities, management support, leadership, and human development, could be examined.

Future researchers should consider studying small healthcare businesses such as rehabilitation centers, clinics, and medical offices, dialysis centers, hospice homes, nursing homes, and urgent care clinics in different geographical locations. These studies could focus on examining the relationship between factors that affect nurses' job satisfaction and turnover. I also recommend that future researchers use a different research method, such as qualitative or mixed methods, to examine strategies used to increase job satisfaction and reduce employees. Future researchers could also add to the limited scholarly literature that exists and increase understanding of the effective techniques used to increase nurses' job satisfaction levels and reduce voluntary turnover intention.

Researchers should also conduct studies to explore reasons for the high job dissatisfaction and turnover intentions among nurses not covered in this study, which should help address the limitations identified in this study, such as geographic, target population, and nurses' standard. I recommend other researchers conduct future studies about nurses' job dissatisfaction and turnover intention to help healthcare leaders identify

factors that affect nurses' turnover intention and create strategies that would increase job satisfaction while retaining nurses from quitting or intention to leave the organization. Offering additional strategies to healthcare leaders to learn about nurses' views of the quality of work environments, level of management support, opportunities for promotion, and nurses' voluntary turnover intentions could provide opportunities for healthcare leaders to effectively improve areas that contribute to employee dissatisfaction with their job, and thinking about leaving the organization.

Reflections

As I reflect upon my experience, the entire process, including Walden University's requirements via the DBA rubric, the IRB process, the APA format, and the faculty guidelines, was difficult at times to overcome. The challenges of balancing life/work and school during my DBA Doctoral Study process were the most challenging drawbacks. I worked hard to meet and exceed the DBA requirements. Interacting with other colleagues with similar interests helped me overcome my frustration and feel overwhelmed throughout my DBA process. Looking at the result of this study was yet another way to stay motivated and keeps pushing forward.

The critical part of my study focuses on employee job (dis) satisfaction and turnover intention for nurses. This study allowed me to examine the quality of work environments, management support, and opportunities for promotion, which I can relate to in a professional setting. Findings from this study might help managers empower their staff by creating a healthy work environment, form a positive nurse-manager relationship, and recognize promotional tools and see the value of job promotion to employees, which

will help retain employees in the organization. Based on my findings, I now understand why the work environment's intrinsic job satisfaction is the main predictor of turnover intentions because I had experienced it.

Completing this study was very informative and rewarded at the same as I was addressing a specific business problem in hospital setting about some nurse managers may not know the relationship between nurses' views of the quality of work environments, level of management support, opportunities for promotion, and high employee turnover intention. The DBA process granted me a better understanding of intrinsic and extrinsic job satisfaction factors related to employees' job (dis) satisfaction and turnover.

Conclusion

Turnover is a significant issue for many organizations globally. Therefore, business leaders must gain the knowledge necessary to understand the importance of their employee's job satisfaction levels and work toward addressing the issues. The direct and indirect costs of employee turnover have negative consequences for organizations. In healthcare industries, nurses are vital because they advocate for patients, promote wellness strategies to people in the communities, and deliver the best care for patients and their families. To retain nurses, healthcare leaders need to develop strategies to increase nurses' job satisfaction and reduce turnover rates.

This study's findings partially supported the theoretical framework by Herzberg (1959), who postulated that intrinsic job satisfaction and extrinsic job satisfaction were predictors of turnover intention. This study shows the intrinsic job satisfaction of the

work environment is a precursor to turnover among nurses. Providing healthy work environments can influence effective work engagement among nurses in the workplace. Several researchers have examined the impact of high turnover rates and the associated costs that affect hospital finances. Based on this study's findings and other studies, it is critical that healthcare leaders comprehend turnover and the related costs of employees leaving their jobs. Retaining desired and skillful employees and creating a stimulating positive work environment should be a priority of any healthcare leader in the organization, which will reduce the turnover intention of nurses in the hospitals.

References

- Abdullah, L., & Leong, W. H. (2018). The relationship of economic variables and final energy consumption: multiple linear regression evidence. *MATEC Web of Conferences*, 189, 10025. doi:10.1051/mateconf/201818910025
- Abualrub, R., El-Jardali, F., Jamal, D., & Al-Rub, N. A. (2016). Exploring the relationship between work environment, job satisfaction, and intent to stay of Jordanian nurses in underserved areas. *Applied Nursing Research*, 31, 19–23. doi:10.1016/j.apnr.2015.11.014
- Aga, D. A., Noorderhaven, N., & Vallejo, B. (2016). Transformational leadership and project success: The mediating role of team-building. *International Journal of Project Management*, 34, 806–818. doi:10.1016/j.ijproman.2016.02.012
- Alam, A., & Asim, M. (2019). Relationship between job satisfaction and turnover intention. *International Journal of Human Resources Studies*, 9(2), 163–194, doi:10.5296/ijhrs.v9i2.14618
- AlBattat, A. R., Som, A. P. M., & Helalat, A. S. (2013). Overcoming staff turnover in the hospitality industry using Mobley's model. *International Journal of Learning and Development*, 3, 64–71. doi:10.5296/ijld.v3i6.484
- AlBattat, A. R. S., & Som, A. P. M. (2013). Employee dissatisfaction and turnover crises in the Malaysian hospitality industry. *International Journal of Business and Management*, 8(5). doi:10.5539/ijbm.v8n5p62
- Alboliteeh, M., Magarey, J., & Wiechula, R. (2017). The profile of Saudi nursing workforce: A cross-sectional study. *Nursing Research and Practice*, 2017.

doi:10.1155/2017/1710686

- Alfayad, Z., & Arif, L. S. M. (2017). Employee voice and job satisfaction: An application of Herzberg two-factor theory. *International Review of Management and Marketing, Econjournals*, 7(1), 150–156. Retrieved from <http://econjournals.com/index.php/irmm/article/view/3342/pdf>
- Al-Hamdan, Z., Manojlovich, M., & Tanima, B. (2017). Jordanian nursing work environments, intent to stay, and job satisfaction. *Journal of Nursing Scholarship*, 49(1), 103–110. doi:10.1111/jnu.12265
- Al-Hussami, M., Darawad, M., Saleh, A., & Hayajneh, F. A. (2014). Predicting nurses' turnover intentions by demographic characteristics, perception of health, quality of work attitudes. *International Journal of Nursing Practice*, 20(1), 79–88. doi:10.1111/ijn.12124
- Ali, A. A., Edwin, O., & Tirimba, O. I. (2015). Analysis of extrinsic rewards and employee satisfaction: Case of Somtel company in Somaliland. *International Journal of Business Management & Economic Research*, 6, 417–435. Retrieved from <http://www.ijbmer.com/docs/volumes/vol6issue6/ijbmer2015060609.pdf>
- Almalki, S. (2016). Integrating quantitative and qualitative data in mixed methods research—Challenges and benefits. *Journal of Education and Learning*, 5(3), 288–296. doi:10.5539/jel.v5n3p288
- Al Mamun, C. A., & Hasan, M. N. (2017). Factors affecting employee turnover and sound retention strategies in business organization: a conceptual view. *Management (open-access)*, 15(1), 63–71. doi:10.21511/ppm.15 (1).2017.06

- Al Maqbali, M. A. (2015). Job satisfaction of nurses in a regional hospital in Oman: a cross-sectional survey. *Journal of Nursing Research*, 23, 206–216.
doi:10.1097/jnr.0000000000000081
- Almuhsen, F., Alkorashy, H., Baddar, F., & Qasim, A. (2017). Work environment characteristics as perceived by nurses in Saudi Arabia. *International Journal of Advanced Nursing Studies*, 6(1), 45–55. doi:10.14419/ijans.v6i1.7453
- 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.
doi:10.1111/jnu.12528
- Alshmemri, M., Shahwan-Akl, L., & Maude, P. (2016). Job satisfaction of Saudi nurses working in Makkah Region public hospitals, Saudi Arabia. *Life Science Journal*, 13, 22–33. doi:10.7537/marslsj131216.05.
- Alvi, M. (2016). *A manual for selecting sampling techniques in research*. Munich Personal RePEc Archive No. 70218. Retrieved from <https://mpra.ub.uni-muenchen.de/70218/>
- Armaghani, D. J., Mohamad, E. T., Hajihassani, M., Yagiz, S., & Motaghedi, H. (2016). Application of several non-linear prediction tools for estimating uniaxial compressive strength of granitic rocks and comparison of their performances. *Engineering with Computers*, 32, 189–206. doi:10.1007/s00366-015-0410-5
- Aronson, K. R. (2005). Job satisfaction of nurses who work in private psychiatric

- hospitals. *Psychiatric Services*, 56(1), 102–104. doi:10.1176/appi.ps.56.1.102
- Asamani, J. A., Naab, F., & Ofei, A. M. A. (2016). Leadership styles in nursing management: Implications for staff outcomes. *Journal of Health Sciences*, 6(1), 23–36. doi:10.17532/jhsci.2016.266
- Asegid, A., Belachew, T., & Yimam, E. (2014). Factors influencing job satisfaction and anticipated turnover among nurses in Sidama Zone public health facilities, South Ethiopia. *Nursing Research and Practice*, 2014, 1–26. doi:10.1155/2014/909768
- Asiret, G. D., Kapucu, S., Kose, T. K., Kurt, B., & Ersoy, N. A. (2017). Attitudes and satisfaction of nurses with the work environment in Turkey. *International Journal of Caring Sciences*, 10, 771–780. Retrieved from <http://www.internationaljournalofcaringsciences.org/Issue.aspx?issueID=45>
- Ataliç, H., Can, A., & Cantürk, N. (2016). Herzberg's motivation-hygiene theory applied to high school teachers in Turkey. *European Journal of Multidisciplinary Studies*, 1, 90–97. doi:10.26417/ejms.v1i4.p90-97
- Atefi, N., Abdullah, K. L., Wong, L. P., & Mazlom, R. (2014). Factors influencing registered nurses perception of their overall job satisfaction: A qualitative study. *International Nursing Review*, 61, 352–360. doi:10.1111/jonm.12151
- Banafti, S. A., Alavikolaei, S. E., & Esfajir, A. A. A. (2016). Studying the factors affecting turnover intention of nurses in hospitals in Sari, Iran. *Journal of Current Research in Science*, 1(2). Retrieved from <http://jcrs010.com>
- Bandilla, W. (2016). *Web Surveys (Version 2.0) (GESIS Survey Guidelines)*. Mannheim, Germany: GESIS - Leibniz-Institut für Sozialwissenschaften. doi:10.15465/gesis-

sg_en_003

- Barker, L. E., & Shaw, K. M. (2015). Best (but of t-forgotten) practices: checking assumptions concerning regression residuals. *The American Journal of Clinical Nutrition*, *102*, 533–539. doi:10.3945/ajcn.115.113498
- Barber, E. A., Everard, T., Holland, A. E., Tipping, C., Bradley, S. J., & Hodgson, C. L. (2015). Barriers and facilitators to early mobilisation in intensive care: A qualitative study. *Australian Critical Care*, *28*, 177–182. doi:10.1016/j.aucc.2014.11.001
- Bärnighausen, T., Tugwell, P., Røttingen, J. A., Shemilt, I., Rockers, P., Geldsetzer, P., ... Bor, J. (2017). Quasi-experimental study designs series—paper 4: Uses and value. *Journal of Clinical Epidemiology*, *89*, 21–29. doi:10.1016/j.jclinepi.2017.03.012
- Batura, N., Skordis-Worrall, J., Thapa, R., Basnyat, R., & Morrison, J. (2016). Is the job satisfaction survey a good tool to measure job satisfaction amongst health workers in Nepal? Results of a validation analysis. *BMC Health Services Research*, *16*(1), 308. doi:10.1186/s12913-016-1558-4
- Bejami, M., Gharavian, D., & Charkari, N. (2014). Audiovisual emotion recognition using ANOVA feature selection method and multi-classifier neural networks. *Neural Computing and Applications*, *24*, 1–14. doi:10.1007/s00521-012-1228-3
- Benito, J. J., & García, S. E. R. (2016). Informed consent in the ethics of responsibility as stated by Emmanuel Levinas. *Medicine, Health Care and Philosophy*, *19*, 443–453. doi:10.1007/s11019-016-9700-y
- Ben-Natan, M., Sharon, I., Barbashov, P., Minasyan, Y., Hanukayev, I. ... Klein-

- Kremer, A. (2014). Risk factors for child abuse: Quantitative correlational design. *Journal of Pediatric Nursing: Nursing Care of Children and Families*, 29, 220–227. doi:10.1016/j.pedn.2013.10.009
- Bertram, T., Formosinho, J., Gray, C., Pascal, C., & Whalley, M. (2016). EECERA ethical code for early childhood researchers. *European Early Childhood Education Research Journal*, 24(1), iii-xiii. doi:10.1080/1350293X.2016.1120533
- Biau, D. J., Kernéis, S., & Porcher, R. (2008). Statistics in Brief: The importance of sample size in the planning and interpretation of medical research. *Clinical Orthopaedics and Related Research*, 466, 2282–2288. doi:10.1007/s11999-008-0346-9
- Boamah, S. A., & Laschinger, H. (2016). The influence of areas of worklife fit and work-life interference on burnout and turnover intentions among new graduate nurses. *Journal of Nursing Management*, 24, E164-E174. doi:10.1111/jonm.12318
- Bormann, L., & Abrahamson, K. (2014). Do staff nurse perceptions of nurse leadership behaviors influence staff nurse job satisfaction? The case of a hospital applying for magnet designation. *Journal of Nursing Administration*, 44, 219–225. doi:10.1097/NNA.0000000000000053
- Bothma, C. F., & Roodt, G. (2013). The validation of the turnover intention scale. *SA Journal of Human Resource Management*, 11(1), 1–12. doi:10.4102/sajhrm.v11i1.507
- Britton, K. L. (2017). *Descriptive comparative study of nursing faculty self-efficacy in the simulation setting* (Order No. 10256657). Available from ProQuest Dissertations

- & Theses Global. (1879722855). Retrieved from
<https://ezp.waldenulibrary.org/login?url=https://search-proquest-com.ezp.waldenulibrary.org/docview/1879722855?accountid=14872>
- Brooks, G. P., & Barcikowski, R. S. (2012). The PEAR method for sample sizes in multiple linear regression. *Multiple Linear Regression Viewpoints*, 38, 1–16. Retrieved from http://www.glmj.org/archives/articles/Brooks_v38n2.pdf.
- Brown, S. S., Lindell, D. F., Dolansky, M. A., & Garber, J. S. (2015). Nurses' professional values and attitudes toward collaboration with physicians. *Nursing ethics*, 22, 205–216. doi:10.1177/0969733014533233
- Bruyneel, L., Thoelen, T., Adriaenssens, J., & Sermeus, W. (2017). Emergency room nurses' pathway to turnover intention: a moderated serial mediation analysis. *Journal of Advanced Nursing*, 73, 930–942. doi:10.1111/jan.13188
- Cai, L., & Zhu, Y. (2015). The challenges of data quality and data quality assessment in the big data era. *Data Science Journal*, 14, 1–10. doi:10.5334/dsj-2015-002
- Cao, N., Lin, Y. R., Gotz, D., & Du, F. (2018). Z-Glyph: Visualizing outliers in multivariate data. *Information Visualization*, 17(1), 22–40. doi:10.1177/1473871616686635
- Chandra, T. (2016). The influence of leadership styles, work environment and job satisfaction of employee performance--studies in the school of SMPN 10 Surabaya. *International Education Studies*, 9, 131–140. doi:10.5539/ies.v9n1p131
- Cheema, J. R. (2014). A review of missing data handling methods in education research. *Review of Educational Research*, 84, 487–508. doi:10.3102/0034654314532697

- Chen, Q., Yang, L., Feng, Q., & Tighe, S. S. (2017). Job satisfaction analysis in rural china: A qualitative study of doctors in a township hospital. *Scientifica Journal*, 2017, 1–6. doi:10.1155/2017/1964087
- Chinomona, E., & Mofokeng, T. M. (2016). Impact of organisational politics on job dissatisfaction and turnover intention: An application of social exchange theory on employees working in Zimbabwean small and medium enterprises (SMEs). *Journal of Applied Business Research*, 32, 857–870. doi:10.19030/jabr.v32i3.9661
- Chipeta, E., Bradley, S., Chimwaza-Manda, W., & McAuliffe, E. (2016). Working relationships between obstetric care staff and their managers: A critical incident analysis. *BMC Health Services Research*, 16, 1–9. doi:10.1186/s12913-016-1694-x
- Cho, E., Chin, D. L., Kim, S., & Hong, O. (2016). The relationships of nurse staffing level and work environment with patient adverse events. *Journal of Nursing Scholarship*, 48(1), 74–82. doi:10.1111/jnu.12183
- Cho, E., Sloane, D. M., Kim, E. Y., Kim, S., Choi, M., Yoo, I. Y., ... & Aiken, L. H. (2015). Effects of nurse staffing, work environments, and education on patient mortality: an observational study. *International Journal of Nursing Studies*, 52, 535–542. doi:10.1016/j.ijnurstu.2014.08.006
- Choy, L. T. (2014). The strengths and weaknesses of research methodology: Comparison and complimentary between qualitative and quantitative approaches. *IOSR Journal of Humanities and Social Science*, 19, 99–104. doi:10.9790/0837-

194399104

Cocanour, C. S. (2017). Informed consent - It's more than a signature on a piece of paper.

The American Journal of Surgery, 214, 993–997.

doi:10.1016/j.amjsurg.2017.09.015

Cook, B. G., & Cook, L. (2016). Research designs and special education research:

Different designs address different questions. *Learning Disabilities Research & Practice*, 31(4), 190–198. doi:10.1111/ldrp.12110

Cuff, E. (2014). The effect and importance of technology in the research process. *Journal*

of Educational Technology Systems, 43(1), 75–97. doi:10.2190/ET.43.1.f

Cummings, G. G., Tate, K., Lee, S., Wong, C. A., Paananen, T., Micaroni, S. P., &

Chatterjee, G. E. (2018). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International journal of nursing studies*, 85, 19–60. doi.org/10.1016/j.ijnurstu.2018.04.016

Curtis, E. A., Comiskey, C., & Dempsey, O. (2016). Importance and use of correlational

research. *Nurse Researcher*, 23, 20–25. doi:10.7748/nr.2016.e1382

Czerniak, C., & Berkner, J. (2016). *Exploring the relationship between developing*

intuition and intuitive decision-making: A quasi-experimental research design.

Retrieved from Sophia, the St. Catherine University repository website:

https://sophia.stkate.edu/ma_hhs/7

Dasgupta, P. (2015). Turnover intentions among nurses in private hospitals: Antecedents and mediators. *Journal of Strategic Human Resource Management*, 4, 1–15.

doi:10.21863/jshrm/2015.4.3.014.

- Dawson, A. J., Stasa, H., Roche, M. A., Homer, C. S. E., & Duffield, C. (2014). Nursing churn and turnover in Australian hospitals: Nurses perceptions and suggestions for supportive strategies. *BMC Nursing, 13*, 1–10. doi:10.1186/1472-6955-13-11
- Demirtas, O., & Akdogan, A. A. (2015). The effect of ethical leadership behavior on ethical climate, turnover intention, and affective commitment. *Journal of Business Ethics, 130*(1), 59–67. doi:10.1007/s10551-014-2196-6
- Dikko, M. (2016). Establishing construct validity and reliability: Pilot testing of a qualitative interview for research in Takaful (Islamic insurance). *The Qualitative Report, 21*, 521–528. Retrieved from <https://nsuworks.nova.edu/tqr/vol21/iss3/6>
- Dooly, M., Moore, E., & Vallejo, C. (2017). Research ethics. Qualitative approaches to research on plurilingual education. *Research-publishing.net*. (pp. 351–362). doi:10.14705/rpnet.2017.emmd2016.634
- Duffield, C. M., Roche, M. A., Homer, C., Buchan, J., & Dimitrelis, S. (2014). A comparative review of nurse turnover rates and costs across countries. *Journal of Advanced Nursing, 70*, 2703–2712. doi:10.1111/jan.12483
- Erickson, L. K., Mierzwa, F. J., Karuntzos, G. T., Fox, K. E., McHale, S. M., & Buxton, O. M. (2015). Implementation strategies for workplace data collection: A case study. *Survey Practice, 8*, 1–9. doi:10.29115/SP-2015-0026
- 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
- Faber, J., & Fonseca, L. M. (2014). How sample size influences research outcomes.

Dental press journal of orthodontics, 19(4), 27–29. doi:10.1590/2176-9451.19.4.027-029.ebo

- Farmer, L., & Lundy, A. (2017). Informed consent: Ethical and legal considerations for advanced practice nurses. *The Journal for Nurse Practitioners*, 13, 124–130. doi:10.1016/j.nurpra.2016.08.011
- Feather, R. A., Ebright, P., & Bakas, T. (2015, April). Nurse manager behaviors that RNs perceive to affect their job satisfaction. *Nursing Forum*, 50, 125–136. doi:10.1111/nuf.12086
- Fritz, M. S., Cox, M. G., & MacKinnon, D. P. (2015). Increasing statistical power in mediation models without increasing sample size. *Evaluation & the Health Professions*, 38, 343–366. doi:10.1177/0163278713514250
- García-Pérez, M. A. (2012). Statistical conclusion validity: Some common threats and simple remedies. *Frontiers in psychology*, 3, 325. doi:10.3389/fpsyg.2012.00325
- Getie, G. A., Betre, E. T., & Hareri, H. A. (2015). Assessment of factors affecting turnover intention among nurses working at governmental health care institutions in East Gojjam, Amhara Region, Ethiopia, 2013. *American Journal of Nursing Science*, 4, 107–112. doi:10.11648/j.ajns.20150403.19
- Gholami Fesharaki, M., Talebiyan, D., Aghamiri, Z., & Mohammadian, M. (2012). Reliability and validity of “Job Satisfaction Survey” questionnaire in military health care workers. *Journal of Military Medicine*, 13, 241–246. Retrieved from <http://militarymedj.ir/article-1-895-en.html>
- Gov, O. (2015). The complex relationship between intrinsic and extrinsic rewards.

Economics and Business Review, 1(4), 102–125. doi:10.18559/ebr.2015.4.7

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

Greenland, S., Senn, S. J., Rothman, K. J., Carlin, J. B., Poole, C., Goodman, S. N., & Altman, D. G. (2016). Statistical tests, P values, confidence intervals, and power: a guide to misinterpretations. *European Journal of Epidemiology*, 31, 337–350. doi:10.1007/s10654-016-0149-3

Hanaysha, J. (2016). The importance of social media advertisements in enhancing brand equity: A study on fast food restaurant industry in Malaysia. *International Journal of Innovation, Management and Technology*, 7, 46–51. doi:10.18178/ijimt.2016.7.2.643

HariPriya, K. & Gunasundari, K. (2016). An exploratory study on the factors impacting turnover intentions among nursing staff in Coimbatore District. *Indian Journal of Applied Research*, 6(1), 237–240. doi:10.15373/2249555X

Harriss, D. J., & Atkinson, G. (2015). Ethical standards in sport and exercise science research: 2016 update. *International journal of sports medicine*, 36, 1121–1124. doi:10.1055/s-0035-1565186

Hashem, I. A. T., Yaqoob, I., Anuar, N. B., Mokhtar, S., Gani, A., & Khan, S. U. (2015). The rise of “big data” on cloud computing: Review and open research issues. *Information Systems*, 47, 98–115. doi:10.1016/j.is.2014.07.006

Hashemi, S. M., Jusoh, J., Kiumarsi, S., & Hashemi, F. (2015). Determinant of employees job satisfaction and the role of male and female differences: an

empirical study at hotel industry in Iran. *JOHAR*, 10(1), 15–36.

doi:10.21863/johar/2015.10.1.001

Hayward, D., Bungay, V., Wolff, A. C., & MacDonald, V. (2016). A qualitative study of experienced nurses' voluntary turnover: Learning from their perspectives. *Journal of Clinical Nursing*, 25, 1336–1345, doi:10.1111/jocn.13210

Hazzi, O., & Maldaon, I. (2015). A pilot study: Vital methodological issues. *Business: Theory and Practice*, 16, 53–62. doi:10.3846/btp.2015.437

Heinrich Heine Universität Düsseldorf. (2016). G*Power: Statistical power analyses for windows and mac. Retrieved from <http://www.gpower.hhu.de/en.html>

Herzberg, F. (1968). One more time: How do you motivate employees? *New York: The Leader Manager*, 433–448. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/12545925>

Ho, J. K. K. (2014). A Research Note on Facebook-based questionnaire survey for academic research in business studies. *European Academic Research*, 2, 9243–9257. Retrieved from <http://euacademic.org/UploadArticle/1009.pdf>

Holston-Okae, B. L., & Mushi, R. J. (2018). Employee turnover in the hospitality industry using Herzberg's two-factor motivation-hygiene theory. *International Journal of Academic Research in Business and Social Sciences*, 8(1), 218–248 doi:10.6007/IJARBSS/v8-i1/3778

Hoover, B., & Nevitt, G. (2016). Modeling the importance of sample size in relation to error in MHC-based mate-choice studies on natural populations. *Integrative and Comparative Biology*, 56, 925–933. doi:10.1093/icb/icw105

- Horevoorts, N. J., Vissers, P. A., Mols, F., Thong, M. S., & van de Poll-Franse, L. V. (2015). Response rates for patient-reported outcomes using web-based versus paper questionnaires: comparison of two invitational methods in older colorectal cancer patients. *Journal of Medical Internet Research, 17*, e111. doi:10.2196/jmir.3741
- Huddleston, P. (2014). Healthy work environment framework within an acute care setting. *Journal of Theory Construction & Testing, 18*(2), 50–54. Retrieved from <https://www.journaltocs.ac.uk/>
- Hussein, A. (2015). The use of triangulation in social sciences research: Can qualitative and quantitative methods be combined? *Journal of Comparative Social Work, 4*(1), 1–12. Retrieved from <http://journal.uia.no/index.php/JCSW/article/view/212/147>
- Jehanzeb, K., Hamid, A. B. A., & Rasheed, A. (2015). What is the role of training and job satisfaction on turnover intentions? *International Business Research, 8*, 208–220. doi:10.5539/ibr.v8n3p208
- Jeon, J. (2015). The strengths and limitations of the statistical modeling of complex social phenomenon: Focusing on SEM, path analysis, or multiple regression models. *International Journal of Economics and Management Engineering, 9*, 1634–1642. doi:10.5281/zenodo.1105869
- Ibrahim, M. A. (2014). The effect of motivation on organizational citizenship behavior (OCB) at Telkom Indonesia in Makassar. *Bisnis & Birokrasi Journal, 21*, 114–120. doi:10.20476/jbb.v21i2.4324.

- Khamisa, N., Oldenburg, B., Peltzer, K., & Ilic, D. (2015). Work related stress, burnout, job satisfaction and general health of nurses. *International Journal of Environmental Research and Public Health*, *12*, 652–666.
doi:10.3390/ijerph120100652
- Khazaal, Y., Van Singer, M., Chatton, A., Achab, S., Zullino, D., Rothen, S., ... & Thorens, G. (2014). Does self-selection affect samples' representativeness in online surveys? An investigation in online video game research. *Journal of Medical Internet research*, *16*, 1–10. doi:10.2196/jmir.2759
- Kim, J. (2015). What increases public employees' turnover intention? *Public Personnel Management*, *44*, 496–519. doi:10.1177/0091026015604447
- Kim, T. K. (2015). T test as a parametric statistic. *Korean Journal of Anesthesiology*, *68*, 540–546. doi:10.4097/kjae.2015.68.6.540
- Kozleski, E. B. (2017). The uses of qualitative research: Powerful methods to inform evidence-based practice in education. *Research and Practice for Persons with Severe Disabilities*, *42*(1), 19–32. doi:10.1177/1540796916683710
- Koppoe, S. N. (2018). *Predictive relationships between electronic health records attributes and meaningful use objectives*. (Doctoral dissertation). ScholarWorks.
- Kovner, C. T., Djukic, M., Fatehi, F. K., Fletcher, J., Jun, J., Brewer, C., & Chacko, T. (2016). Estimating and preventing hospital internal turnover of newly licensed nurses: A panel survey. *International Journal of Nursing Studies*, *60*, 251–262.
doi:10.1016/j.ijnurstu.2016.05.003
- Kuokkanen, L., Leino-Kilpi, H., Numminen, O., Isoaho, H., Flinkman, M., & Meretoja,

- R. (2016). Newly graduated nurses' empowerment regarding professional competence and other work-related factors. *BMC Nursing, 15*, 1–8.
doi:10.1186/s12912-016-0143-9
- Kyvik, S. (2013). The academic researcher role: Enhancing expectations and improved performance. *Higher Education, 65*, 525–538. doi:10.1007/s10734-012-9561-0
- Labrague, L. J., McEnroe–Petitte, D. M., Leocadio, M., Van Bogaert, P., & Cummings, G. G. (2017). Stress and ways of coping among nurse managers: An integrative review. *Journal of Clinical Nursing, 27*, 1346–1359. doi:10.1111/jocn.14165
- Lake, E. T., Hallowell, S. G., Kutney-Lee, A., Hatfield, L. A., Del Guidice, M., Boxer, B., ... & Aiken, L. H. (2016). Higher quality of care and patient safety associated with better NICU work environments. *Journal of Nursing Care Quality, 31*(1), 24–32. doi:10.1097/NCQ.0000000000000146
- Laschinger, H. K. S., Cummings, G., Leiter, M., Wong, C., MacPhee, M., Ritchie, J., ... & Young-Ritchie, C. (2016). Starting out: A time-lagged study of new graduate nurses' transition to practice. *International Journal of Nursing Studies, 57*, 82–95. doi:10.1016/j.ijnurstu.2016.01.005
- Laschinger, H. K., & Fida, R. (2015). Linking nursing perceptions of patient care quality to job satisfaction: The role of authentic leadership and empowering professional practice environments. *Journal of Nursing Administration, 45*, 276–283. doi:10.1097/NNA.0000000000000198
- Li, X. J., Yao, K., Dai, J. Y., & Song, Y. L. (2018). Research on influence and prediction model of urban traffic link tunnel curvature on fire temperature based on pyrosim-

- SPSS multiple regression analysis. *Earth & Environmental Science*, 153(6), 062032. doi:10.1088/1755-1315/153/6/062032
- Lin, W. Y., Lan, L., Huang, F. H., & Wang, M. H. (2015). Rough-set-based ADR signaling from spontaneous reporting data with missing values. *Journal of Biomedical Informatics*, 58, 235–246. doi:10.1016/j.jbi.2015.10.013
- Ly, A., Marsman, M., & Wagenmakers, E. J. (2018). Analytic posteriors for Pearson's correlation coefficient. *Statistica Neerlandica*, 72(1), 4–13. doi:10.1111/stan.12111
- Madeyski, L., & Jureczko, M. (2015). Which process metrics can significantly improve defect prediction models? An empirical study. *Software Quality Journal*, 23, 393–422. doi:10.1007/s11219
- Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research*, 26, 1753–1760. doi:10.1177/1049732315617444
- Marshall, C., & Rossman, G. B. (2014). *Designing qualitative research*. Thousand Oaks, CA: Sage.
- Martínez-Mesa, J., González-Chica, D. A., Duquia, R. P., Bonamigo, R. R., & Bastos, J. L. (2016). Sampling: how to select participants in my research study? *Anais Brasileiros de Dermatologia*, 91(3), 326–330. doi:10.1590/abd1806-4841.20165254
- McCusker, K., & Gunaydin, S. (2015). Research using qualitative, quantitative or mixed methods and choice based on the research. *Perfusion*, 30, 537–542.

doi:10.1177/0267659114559116

McPeake, J., Bateson, M., & O'Neill, A. (2014). Electronic surveys: How to maximise success. *Nurse Researcher*, *21*, 24–26. doi:10.7748/nr2014.01.21.3.24.e1205

Miltner, R. S., Jukkala, A., Dawson, M. A., & Patrician, P. A. (2015). Professional development needs of nurse managers. *The Journal of Continuing Education in Nursing*, *46*, 252–258. doi:10.3928/00220124-20150518-01

Minbaeva, D., Pedersen, T., Björkman, I., Fey, C. F., & Park, H. J. (2014). MNC knowledge transfer, subsidiary absorptive capacity and HRM. *Journal of International Business Studies*, *45*(1), 38–51. doi:10.1057/jibs.2013.43

Miracle, V. A. (2016). The Belmont report: The triple crown of research ethics. *Dimensions of Critical Care Nursing*, *35*, 223–228.

doi:10.1097/DCC.0000000000000186

Mobley, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology*, *62*, 237–240.

doi:10.1037/0021-9010.62.2.237

Mohamad Asri, M. N., Hashim, N. H., Mat Desa, W. N. S., & Ismail, D. (2018). Pearson Product Moment Correlation (PPMC) and Principal Component Analysis (PCA) for objective comparison and source determination of unbranded black ballpoint pen inks. *Australian Journal of Forensic Sciences*, *50*, 323–340.

doi:10.1080/00450618.2016.1236292

Mukhtar, M. (2015). Perceptions of UK based customers toward internet banking in the United Kingdom. *Journal of Internet Banking & Commerce*, *20*(1), 1–38.

Retrieved from <http://www.icommercecentral.com>

- Murugiah, L., & Akgam, H. A. (2015). Study of customer satisfaction in the banking sector in Libya. *Journal of Economics, Business and Management*, 3, 674–677. doi:10.7763/JOEBM.2015.V3.264
- Najafi, A., & Kong, R. T. L. (2015). Productivity modeling of precast concrete installation using multiple regression analysis. *ARP Journal of Engineering and Applied Sciences*, 10, 2496–2503. Retrieved from https://www.arpnournals.com/jeas/research_papers/rp_2015/jeas_0415_11786.pdf
- Nantsupawat, A., Kunaviktikul, W., Nantsupawat, R., Wichaikhum, O. A., Thienthong, H., & Poghosyan, L. (2017). Effects of nurse work environment on job dissatisfaction, burnout, intention to leave. *International Nursing Review*, 64(1), 91–98. doi:10.1111/inr.12342
- Nantsupawat, A., Nantsupawat, R., Kunaviktikul, W., Turale, S., & Poghosyan, L. (2016). Nurse burnout, nurse-reported quality of care, and patient outcomes in Thai hospitals. *Journal of Nursing Scholarship*, 48(1), 83–90. doi:10.1111/jnu.12187
- Naveed, I., Hussain, A., Sarfraz, M., Afghan, S., & Waqar, S. H. (2016). Assessment of job satisfaction among nurses working in children hospital, Pakistan Institute of Medical Sciences, Islamabad. *Pakistan Journal of Medical Research*, 55, 116–120. Retrieved from <https://www.pjmr.org.pk/index.php/pjmr>
- Nei, D., Snyder, L. A., & Litwiller, B. J. (2015). Promoting retention of nurses: A meta-analytic examination of causes of nurse turnover. *Health Care Management*

Review, 40, 237–253. doi:10.1097/HMR.0000000000000025

- Nguyen, D. T., Kim, E. S., Rodriguez de Gil, P., Kellermann, A., Chen, Y. H., Kromrey, J. D., & Bellara, A. (2016). Parametric tests for two population means under normal and non-normal distributions. *Journal of Modern Applied Statistical Methods*, 15(1), 141–159. doi:10.22237/jmasm/1462075680
- Nguyen, P. D., Dang, C. X., & Nguyen, L. D. (2015). Would better earning, work environment, and promotion opportunities increase employee performance? An investigation in state and other sectors in Vietnam. *Public Organization Review*, 15, 565–579. doi:10.1007/s11115-014-0289-4
- Nogueira, K. S., & Fernandez, C. (2018). The reliability of an instrument to measure teacher knowledge from the perspective of learner in the context of pibid. *Problems of Education in the 21st Century*, 76(1), 69–86. Retrieved from <https://www.oaji.net/articles/2017/457-1519988181.pdf>
- Noor, Z., Khanl, A. U., & Naseem, I. (2015). Impact of job promotion and job advancement on job satisfaction in Universities of KPK province of Pakistan. *Science International Journal (Lahore)*, 27, 1499–1505. Retrieved from <https://www.researchgate.net/publication/306094767>
- NSI Nursing Solutions Inc. (2020). *National healthcare retention and RN staffing report*. Retrieved from https://www.nsinursingsolutions.com/Documents/Library/NSI_National_Health_Care_Retention_Report.pdf
- Oguntunde, P. G., Lischeid, G., & Dietrich, O. (2018). Relationship between rice yield

and climate variables in southwest Nigeria using multiple linear regression and support vector machine analysis. *International journal of biometeorology*, 62, 459–469. doi:10.1007/s00484-017-1454-6

Onen, D. (2016). Appropriate conceptualisation: The foundation of any solid quantitative research. *Electronic Journal of Business Research Methods*, 14(1), 28–38.

Retrieved from <http://www.ejbrm.com>

Osuji, J., Uzoka, F., Aladi, F., & El-Hussein, M. (2014). Understanding the factors that determine registered nurses' turnover intentions. *Research and Theory for Nursing Practice*, 28, 140–161. doi:10.1891/1541-6577.28.2.140

Ouyang, Z., Sang, J., Li, P., & Peng, J. (2015). Organizational justice and job insecurity as mediators of the effect of emotional intelligence on job satisfaction: A study from China. *Personality and Individual Differences*, 76, 147–152. doi:10.1016/j.paid.2014.12.004

Palese, A., Dante, A., Tonzar, L., & Balboni, B. (2014). The N2N instrument to evaluate healthy work environments: an Italian validation. *International archives of occupational and environmental health*, 87, 217–228. doi:10.1007/s00420-013-0851-3

Pandiarajan, S., Kumaran, S. S., Kumaraswamidhas, L. A., & Saravanan, R. (2016). Interfacial microstructure and optimization of friction welding by Taguchi and ANOVA method on SA 213 tube to SA 387 tube plate without backing block using an external tool. *Journal of Alloys and Compounds*, 654, 534–545. doi:10.1016/j.jallcom.2015.09.152

- Park, S. H., Gass, S., & Boyle, D. K. (2016). Comparison of reasons for nurse turnover in magnet and non-magnet hospitals. *Journal of Nursing Administration, 46*, 284–290. doi:10.1097/NNA.0000000000000344
- Parrinello, C. M., Grams, M. E., Couper, D., Ballantyne, C. M., Hoogeveen, R. C., Eckfeldt, J. H., ... & Coresh, J. (2015). Recalibration of blood analytes over 25 years in the atherosclerosis risk in communities study: impact of recalibration on chronic kidney disease prevalence and incidence. *Clinical chemistry, 61*, 938–947. Retrieved from <https://doi-org.ezp.waldenulibrary.org/10.1373/clinchem.2015.238873>
- Plonien, C. (2016). Bullying in the workplace: A leadership perspective. *AORN journal, 103*(1), 107–110. Doi:10.1016/j.aorn.2015.11.014
- Qabaha, K., Hassan, W. A., Mansour, H., Thanigachalam, S., & Naser, S. (2014). Demographic and blood lipid profiles in correlation with heart attacks among Mediterraneans. *Journal of Nutrition & Food Sciences, 4*, 1–7. doi:10.4172/2155-9600.1000284
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences, 6*, 1–5. doi:10.4172/2162-6359.1000403
- Rajan, D. (2015). Employee turnover among nurses - A comparative analysis with respect to push and pull factors. *I-Manager's Journal on Management, 9*(4), 36–47. Retrieved from <https://ezp.waldenulibrary.org/login?qurl=https%3A%2F%2Fsearch.proquest.co>

m%2Fdocview%2F1704467171%3Faccountid%3D14872

- Raziq, A., & Maulabakhsh, R. (2015). Impact of working environment on job satisfaction. *Procedia Economics and Finance*, 23, 717–725. doi:10.1016/S2212-5671(15)00524-9
- Rivaz, M., Momennasab, M., Yektatalab, S., & Ebadi, A. (2017). Adequate resources as essential component in the nursing practice environment: A qualitative study. *Journal of clinical and diagnostic research: JCDR*, 11, 1–4. doi:10.7860/JCDR/2017/25349.9986
- Roche, M. A., Duffield, C. M., Homer, C., Buchan, J., & Dimitrelis, S. (2015). The rate and cost of nurse turnover in Australia. *Collegian*, 22, 353–358. doi:10.1016/j.colegn.2014.05.002
- Roster, C. A., Lucianetti, L., & Albaum, G. (2015). Exploring slider vs. categorical response formats in web-based surveys. *Journal of Research Practice*, 11(1), 1–16. Retrieved from <http://jrp.icaap.org/index.php/jrp/article/view/509/413>
- Rubel, M. R. B., & Kee, D. M. H. (2015). Perceived fairness of performance appraisal, promotion opportunity, and nurses turnover intention: The role of organizational commitment. *Asian Social Science*, 11, 183–197. doi:10.5539/ass.v11n9p183
- Rust, N. A., Abrams, A., Challender, D. W., Chapron, G., Ghoddousi, A., Glikman, J. A., ... & Sutton, A. (2017). Quantity does not always mean quality: The importance of qualitative social science in conservation research. *Society & natural resources*, 30(10), 1304–1310. doi:10.1080/08941920.2017.1333661
- Sá, F., Rocha, Á., & Cota, M. P. (2016). Potential dimensions for a local e-Government

services quality model. *Telematics and Informatics*, 33, 270–276.

doi:10.1016/j.tele.2015.08.

Saeed, I., Waseem, M., Sikander, S., & Rizwan, M. (2014). The relationship of turnover intention with job satisfaction, job performance, leader member exchange, emotional intelligence and organizational commitment. *International Journal of Learning and Development*, 4, 242–256. doi:10.5296/ijld.v4i2.6100

Saha, R. (2016). Factors influencing organizational commitment—research and lessons. *Management Research and Practice*, 8, 36–48. Retrieved from <http://mrp.ase.ro/no83/f4.pdf>

Schobel, J., Schickler, M., Pryss, R., Maier, F., & Reichert, M. (2014). Towards process-driven mobile data collection applications: Requirements, challenges, lessons learned. *Proceedings of the 10th International Conference on Web Information Systems and Technologies*, 2, 371–382. doi:10.5220/0004970203710382

Shamian, J., Kerr, M. S., Laschinger, H. K. S., & Thomson, D. (2016). A hospital-level analysis of the work environment and workforce health indicators for registered nurses in Ontario's acute-care hospitals. *Canadian Journal of Nursing Research Archive*, 33, 35–50. Retrieved from <http://cjr.archive.mcgill.ca/article/view/1657/1657>

Shannon-Baker, P. (2016). Making paradigms meaningful in mixed methods research. *Journal of Mixed Methods Research*, 10(4), 319–334. doi:10.1177/1558689815575861

Sojane, J. S., Klopper, H. C., & Coetzee, S. K. (2016). Leadership, job satisfaction and

intention to leave among registered nurses in the North West and Free State provinces of South Africa. *Curationis*, 39(1), 1–10.

doi:10.4102/curationis.v39i1.1585

Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the job satisfaction survey. *American journal of community psychology*, 13, 693–713. doi:10.1007/BF00929796

Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences*. Thousand Oaks, CA: Sage.

Subedi, B. P. (2016). Using Likert type data in social science research: Confusion, issues and challenges. *International journal of contemporary applied sciences*, 3, 36–49. Retrieved from <https://ijcar.net/assets/pdf/Vol3-No2-February2016/02.pdf>

Tang, H., & Ji, P. (2014). Using the statistical program R instead of SPSS to analyze data. *Tools of Chemistry Education Research*, 135–151. doi:10.1021/bk-2014-1166.ch008

Tarhan, A., & Yilmaz, S. G. (2014). Systematic analyses and comparison of development performance and product quality of incremental process and agile process. *Information and Software Technology*, 56, 477–494. doi:10.1016/j.infsof.2013.12.002

Tharikh, S. M., Ying, C. Y., & Saad, Z. M. (2016). Managing job attitudes: The roles of job satisfaction and organizational commitment on organizational citizenship behaviors. *Procedia Economics and Finance*, 35, 604–611. doi:10.1016/S2212-5671(16)00074-5

- The U.S. Nursing Workforce: Trends in Supply and Education (2013). Retrieved from <https://bhw.hrsa.gov/sites/default/files/bhw/nchwa/projections/nursingworkforcetrendssoct2013.pdf>.
- Thomas-Hawkins, C., Flynn, L., Lindgren, T. G., & Weaver, S. (2015). Nurse manager safety practices in outpatient hemodialysis units. *Nephrology Nursing Journal*, *42*, 125–133. doi:10.1891/1541-6577.29.1.1
- Tsai, C. Y., Horng, J. S., Liu, C. H., & Hu, D. C. (2015). Work environment and atmosphere: The role of organizational support in the creativity performance of tourism and hospitality organizations. *International Journal of Hospitality Management*, *46*, 26–35. doi:10.1016/j.ijhm.2015.01.009
- Tuckett, A., Winters-Chang, P., Bogossian, F., & Wood, M. (2015). ‘Why nurses are leaving the profession... lack of support from managers’: What nurses from an e-cohort study said. *International journal of nursing practice*, *21*, 359–366. doi:10.1111/ijn.12245
- Udod, S., Cummings, G. G., Care, W. D., & Jenkins, M. (2017). Role stressors and coping strategies among nurse managers. *Leadership in Health Services*, *30*(1), 29–43. doi:10.1108/LHS-04-2016-0015
- Ulrich, B. T., Lavandero, R., Woods, D., & Early, S. (2014). Critical care nurse work environments 2013: A status report. *Critical care nurse*, *34*, 64–79. doi:10.4037/ccn2014731
- Unruh, L. Y., & Zhang, N. J. (2014). Newly licensed registered nurse job turnover and turnover intent. *Journal for nurses in professional development*, *30*, 220–230.

doi:10.1097/NND.0000000000000079.

- Varela, C., Ruiz, J., Andrés, A., Roy, R., Fusté, A., & Saldaña, C. (2017). Advantages and Disadvantages of using the website SurveyMonkey in a real study: Psychopathological profile in people with normal-weight, overweight and obesity in a community sample. *E-methodology: the international scientific journal*, 3, 77–89. doi:10.15503/emet2016.77.89
- Vass, C., Rigby, D., & Payne, K. (2017). The role of qualitative research methods in discrete choice experiments: a systematic review and survey of authors. *Medical Decision Making*, 37(3), 298–313. doi:10.1177/0272989X16683934
- Vijayakumar, V. S. R., & Saxena, U. (2015). Herzberg revisited: dimensionality and structural invariance of Herzberg's two factor model. *Journal of the Indian Academy of Applied Psychology*, 41, 291–298. Retrieved from <https://ezp.waldenulibrary.org/login?url=https://search-proquest-com.ezp.waldenulibrary.org/docview/1779874631?accountid=14872>
- Vitak, J., Shilton, K., & Ashktorab, Z. (2016, February). Beyond the Belmont principles: Ethical challenges, practices, and beliefs in the online data research community. In *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing*. 941–953. doi:10.1145/2818048.2820078
- Walden University. (2016). *Institutional review board for ethical standards in research*. Retrieved from <http://researchcenter.waldenu.edu/Institutional-Review-Board-for-Ethical-Standards-in-Research.htm>
- Wan, Q., Li, Z., Zhou, W., & Shang, S. (2018). Effects of work environment and job

characteristics on the turnover intention of experienced nurses: The mediating role of work engagement. *Journal of advanced nursing*, 74, 1332–1341.

doi:10.1111/jan.13528

Wang, C. N., Nguyen, N. T., & Tran, T. T. (2014). An empirical study of customer satisfaction towards bank payment card service quality in Ho Chi Minh banking branches. *International Journal of Economics and Finance*, 6(5), 170–181.

doi:10.5539/ijef.v6n5p170

Williams, M. N., Grajales, C. A. G., & Kurkiewicz, D. (2013). Assumptions of multiple regression: Correcting two misconceptions. *Practical Assessment*, 18, 1–14.

Retrieved from <https://pareonline.net/getvn.asp?v=18&n=11>

Wisdom, J., & Creswell, J. W. (2013). Mixed methods: integrating quantitative and qualitative data collection and analysis while studying patient-centered medical home models. *Rockville: Agency for Healthcare Research and Quality*. Retrieved from <http://www.ahrq.gov/>

Wong, K. K., & Hui, S. C. (2015). Ethical principles and standards for the conduct of biomedical research and publication. *Australasian physical & engineering sciences in medicine*, 38, 377–380. doi:10.1007/s13246-015-0364-3

Wu, H., & Leung, S. O. (2017). Can likert scales be treated as interval scales?—A Simulation study. *Journal of Social Service Research*, 43, 527–532.

doi:10.1080/01488376.2017.1329775

Yang, Y., Liu, Y. H., Liu, J. Y., & Zhang, H. F. (2015). The impact of work support and organizational career growth on nurse turnover intention in China. *International*

Journal of Nursing Sciences, 2(2), 134–139.

<https://doi.org/10.1016/j.ijnss.2015.04.006>

Yarbrough, S., Martin, P., Alfred, D., & McNeill, C. (2017). Professional values, job satisfaction, career development, and intent to stay. *Nursing Ethics*, 24, 675–685. doi:10.1177/0969733015623098

Yoo, M. S., & Kim, K. J. (2017). Exploring the influence of nurse work environment and patient safety culture on attitudes toward incident reporting. *Journal of Nursing Administration*, 47, 434–440. doi:10.1097/NNA.0000000000000510

Yu, H., Jiang, S., & Land, K. C. (2015). Multicollinearity in hierarchical linear models. *Social science research*, 53, 118–136. doi:10.1016/j.ssresearch.2015.04.008

Yu, M., & Kang, K. J. (2016). Factors affecting turnover intention for new graduate nurses in three transition periods for job and work environment satisfaction. *The Journal of Continuing Education in Nursing*, 47, 120–131. doi:10.3928/00220124-20160218-08

Yusuf, M. (2015). Scope of scientific research in Bangladesh. *Journal of Science Foundation*, 12(1), 1. doi:10.3329/jsf.v12i1.23456

Zafar, M. F., Hasan, T., & Tyagi, V. (2015). Optimization of process parameters for metal removal rate in case of WEMM using continuous DC supply by Taguchi methods and ANOVA Analysis. *International Journal of Current Engineering and Technology*, 5, 1506–1511. Retrieved from <http://inpressco.com/wp-content/uploads/2015/04/Paper21506-1511.pdf>

Zellmer-Bruhn, M., Caligiuri, P., & Thomas, D. C. (2016). From the Editors:

Experimental designs in international business research. *Journal of International Business Studies*, 47, 399–407. doi:10.1057/jibs.2016.12

Zhang, L. F., You, L. M., Liu, K., Zheng, J., Fang, J. B., Lu, M. M., ... & Wu, X. (2014). The association of Chinese hospital work environment with nurse burnout, job satisfaction, and intention to leave. *Nursing Outlook*, 62, 128–137. doi:10.1016/j.outlook.2013.10.010

Appendix A: Job Satisfaction Survey

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

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

Appendix B: Turnover Intention Scale

TURNOVER INTENTION SCALE (TIS)

Copyright © 2004, G. Roodt

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

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

DURING THE PAST 9 MONTHS.....

1	How often have you considered leaving your job?	Never	1-----2-----3-----4-----5	Always
2	How frequently do you scan the newspapers in search of alternative job opportunities?	Never	1-----2-----3-----4-----5	All the time
3	How satisfying is your job in fulfilling your personal needs?	Very satisfying	1-----2-----3-----4-----5	Totally dissatisfying
4	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
5	How often are your personal values at work compromised?	Never	1-----2-----3-----4-----5	Always
6	How often do you dream about getting another job that will better suit your personal needs?	Never	1-----2-----3-----4-----5	Always
7	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
8	How often do you look forward to another day at work?	Always	1-----2-----3-----4-----5	Never
9	How often do you think about starting your own business?	Never	1-----2-----3-----4-----5	Always
10R	To what extent do responsibilities prevent you from quitting your job?	To no extent	1-----2-----3-----4-----5	To a very large extent
11R	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
12	How frequently are you emotionally agitated when arriving home after work?	Never	1-----2-----3-----4-----5	All of the time
13	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
14R	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
15	How frequently do you scan the internet in search of alternative job opportunities?	Never	1-----2-----3-----4-----5	All of the time

Appendix C: Request to Use Job Satisfaction Survey Instrument

From: Mmayen Nnah [mailto:mmayen.nnah@waldenu.edu]
Sent: Monday, August 27, 2018 11:49 AM
To: Spector, Paul <pspector@usf.edu>
Cc: Mmayen Nnah <mmayen.nnah@waldenu.edu>
Subject: Permission to use Job Satisfaction Survey Instrument

Dear Dr. Spector,

My name is Mmayen Nnah, I am currently a doctoral student at Walden University, and I am conducting research on employee job dissatisfaction. Please I would like to use your Job Satisfaction Survey (JSS) Instrument for my research study. I would appreciate your permission to use this instrument in my study, and I agree to abide by the use terms.

Thank you for your consideration,

Mmayen Nnah

Appendix D: Permission to use Job Satisfaction Survey Instrument

From: Spector, Paul <pspector@usf.edu>
Sent: Monday, August 27, 2018 12:58:22 PM
To: Mmayen Nnah
Subject: RE: Permission to use Job Satisfaction Survey Instrument

Dear Mmayen:

You have my permission to use the JSS in your research. You can find copies of the scale in the original English and several other languages, as well as details about the scale's development and norms, in the scales section of my website. I allow free use for noncommercial research and teaching purposes in return for sharing of results. This includes student theses and dissertations, as well as other student research projects. Copies of the scale can be reproduced in a thesis or dissertation as long as the copyright notice is included, "Copyright Paul E. Spector 1994, All rights reserved." Results can be shared by providing an e-copy of a published or unpublished research report (e.g., a dissertation). You also have permission to translate the JSS into another language under the same conditions in addition to sharing a copy of the translation with me. Be sure to include the copyright statement, as well as credit the person who did the translation with the year.

Thank you for your interest in the JSS, and good luck with your research.

Best,

Paul Spector, Distinguished Professor
Department of Psychology
PCD 4118
University of South Florida
Tampa, FL 33620
813-974-0357
pspector [at symbol] usf.edu
<http://shell.cas.usf.edu/~spector>

Appendix E: Request to use TIS-6 Instrument

From: Mmayen Nnah [mailto:mmayen.nnah@waldenu.edu]
Sent: 27 August 2018 06:06 PM
To: Roodt, Gerhard <grootd@uj.ac.za>
Cc: Mmayen Nnah <:mmayen.nnah@waldenu.edu>
Subject: Permission to use TIS-6 Instrument

Dear Prof. Gert Roodt,

My name is Mmayen Nnah, I am currently a doctoral student at Walden University, and I am conducting research on employee job dissatisfaction and Turnover Intentions. Please I would like to use your Turnover Intentions Scale (TIS-6) Instrument for my research study. I would appreciate your permission to use this instrument in my study, and I agree to abide by the use terms.

Thank you for your consideration,

Mmayen Nnah

Appendix F: Permission to use TIS-6 Instrument

From: Roodt, Gerhard <grootd@uj.ac.za>
Sent: Tuesday, August 28, 2018 8:55:30 AM
To: Mmayen Nnah
Subject: RE: Permission to use TIS-6 Instrument

Dear Mmayen

You are welcome to use the TIS!

For this purpose please find attached the longer 15-item version of the scale. The six items used for the TIS-6 are high-lighted. You may use any one of these two versions.

You are welcome to translate the scale if the need arises. I would like to propose the translate – back-translate method by using two different translators. First you translate from English into home language and then back from home language to English to see if you get to the original English wording.

This is the fourth version of the scale and it is no longer required to reverse score any items (on TIS-6). The total score can be calculated by merely adding the individual item scores. I would strongly recommend that you also conduct a CFA on the item scores to determine if any item scores should be reflected.

The only conditions for using the TIS is that you acknowledge authorship (Roodt, 2004) by conventional academic referencing. The TIS may not be used for commercial purposes.

I wish you the very best with your research project!

Best regards

Gert

Prof Gert Roodt
Dept Industrial Psychology & People Management