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Work Engagement, Job Satisfaction, and Nurse Turnover Intention

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Yolanda Edwards-Dandridge

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Walden University
2019

Abstract

Work Engagement, Job Satisfaction, and Nurse

Turnover Intention

by

Yolanda Edwards-Dandridge

MBA, Iona College, 2005

MPA, Long Island University, 1994

BS, Herbert H. Lehman College, 1984

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

March 2019

Abstract

In the United States, the high turnover rate of registered nurses and indications of a future

shortage of registered nurses is detrimental to healthcare organizations. The purpose of

this correlational study was to examine whether, in hospitals, work engagement and job

satisfaction predicted registered nurse turnover intention. The theoretical framework was

Fishbein and Ajzen's theory of reasoned action. Probability sampling was used to

identify 155 participants, all full-time registered nurses with 2 or more years of

employment in New York hospitals. Data, obtained from surveys, were analyzed via

multiple linear regression. The results revealed that only job satisfaction predicted

turnover intention among the nurses sampled, $(F (5,154) = 12.008, p <.001. R^2 = .287.$

The results indicated that low work engagement is not necessarily an indication of job

dissatisfaction or of an individual's intention to leave a job. Leaders of healthcare

organizations might lower nurse turnover intention by focusing on improving job

satisfaction. Specifically, by addressing the issues identified from regular job satisfaction

surveys, and by a greater emphasis on creating a satisfying workplace, overall job

satisfaction might be increased. The potential increased stability of the registered nurse

workforce and the potential cost savings resulting from lower turnover could contribute

to positive social change by improving the delivery of health services and by enhancing

the healthcare experiences of patients, their families, and the surrounding communities.

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Dedication

First, I would like to dedicate this doctoral research to my heavenly Father, God Almighty, for His continued blessings, which instilled confidence, knowledge, and resilience to pursue my dream. Second, I dedicate this doctoral research to my beloved parents, Maxine L. St. Luce-Edwards-Garges and Rudolph V. Edwards, Sr. I thank God for giving me, awesome parents! I live by the values and morals that you taught me, which has defined my character. Your spirits continue to guide and inspire me every day although you are not physically present. I recognize and appreciate your enormous sacrifices so that my siblings and I could achieve beyond your accomplishments. In honor of your unconditional love and support, intellect and wisdom, I share this achievement with you. I love and adore you, forever!

I also dedicate my achievement to my husband, Antoine, and my sons Avian and Arnell. Antoine, from the moment I mentioned my pursuit, you told me that you would support me in whatever I needed, and you fulfilled your promise. Throughout my challenges, you were always by my side to provide your love and encouragement. Avian and Arnell, my inspiration comes from you. I use this journey to reinforce the foundation, established by your father and me, grandparents, and other significant family members and friends, to recognize that there is nothing that can impede you from attaining anything in life. This journey has enhanced my knowledge, provided an opportunity to acquire new skills and resources, which I transferred to you so that you can propel your growth. Antoine, Avian, and Arnell, I know that pursuing my doctorate was a family

sacrifice, and I am grateful for your unconditional love, patience, and understanding. I love you!

I would also like to dedicate my doctorate to Dahlia Dandridge, my mother-in-law and Albert Dandridge, my father-in-law. Thank you for treating me as your "daughter" and for being a significant part in establishing a supportive foundation for my princes, Avian and Arnell, which helped Antoine, and I provide resources to further their pursuit of success. I love you!

Acknowledgments

With God, all things are possible! God placed special people in my life to provide support throughout my doctoral journey, and I take this time to express my appreciation formally. I extend my sincere gratitude to my doctoral committee: my chair, Dr. Brandon Simmons for your unique leadership and professionalism, my second committee chair, Dr. Chad Sines, for your in-depth insight, and collectively for your genuine support that guided me throughout this doctoral journey, which restored my hope. URR, Dr. Douglas Campbell, for his significant critique and sharing of his knowledge, which were instrumental in the transformation of my paper to quality. I acknowledge my new program director, Dr. Susan Davis, for the implementation of elevating professional standards, which helped heighten the doctoral process. I am forever grateful for my former program director, Dr. Freda Turner, and Associate Director, DBA Program, Mr. Fred Walker, who provided moral support and inspiration during the most challenging times throughout my doctoral journey.

I would also like to thank all of my Walden University professors from prior classes as well as former chairs. Each one of you played a significant role in furthering my progress. I express my sincere appreciation to the nursing leaders and the nurse participants who were involved in the data collection process. Without you, I would not have had a research study and would not have achieved my goal of attaining a doctorate. I am grateful to Walden University staff, often provided by the services of the Library, the Writing Center, the IRB, the Quantitative Methodology Office, and Technical

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Section 1: Foundation of the Study

In most of the world, nurses are the backbone of hospital care. However, in the United States, a critical shortage could negatively impact the hospital delivery system (Snavely, 2016). Nurses represent the largest occupational group in hospitals and serve a critical role in delivering high-quality care to patients (Kumari & De Alwis, 2015). The U.S. healthcare industry comprised of approximately 2.9 million registered nurses, of which 30% of these nurses worked in hospitals (U.S. Department of Labor, Bureau of Labor Statistics, 2017a). A significant number of nurses are approaching retirement age, and at the same time, the demand of the healthcare system is increasing because of the aging U.S. population (Jones et al., 2017; Snavely, 2016). This potential nursing shortage could cause a significant problem for the healthcare industry in the United States.

The forecasted U. S. nursing shortage presents a significant issue for healthcare managers. As healthcare managers face the possibility of a nursing shortage, reduced work engagement and job satisfaction may lead nurses to leave their current job (Dempsey & Reilly, 2016; Ostermeier & Camp, 2016). Also, healthcare managers face budgetary challenges in their attempts to develop developing strategies to maintain a stable workforce (Roulin, Mayor, & Bangerter, 2014). Madden, Mathias, and Madden (2015) noted that actual turnover was costly, and to find ways to reduce turnover intention may help healthcare managers enhance organizational goals. Therefore, this quantitative correlational study examined the relationship between work engagement, job satisfaction, and nurse turnover intention in hospitals.

Background of the Problem

In the United States, healthcare spending continues to escalate. The National

Health government officials reported that U.S. healthcare spending could rise at an

average rate of 5.6%, per year, from 2016 to 2025 (Centers for Medicare & Medicaid

Services, 2017). In 2015, healthcare spending represented 17.8% of the gross domestic

product (Centers for Medicare & Medicaid Services, 2017). Although some researchers

have estimated that healthcare spending might decrease, Sisko et al. (2014) concluded

that an aging population could elevate healthcare spending costs. Chen (2014) concurred

that the aging population and contributing factors, such as consumer demand, technology,

and illnesses, might increase healthcare spending. With healthcare spending and the

demands on the healthcare industry increasing at the same time, hospital managers find it

challenging to retain qualified nurses.

With hospital managers challenged to balance budgets, hospital managers may

benefit from addressing the needs of employees who are required to deliver and maintain

quality patient care. With the heightened cost of healthcare, many healthcare managers

face pressure to meet budgetary goals while maintaining a stable workforce that can

deliver high-quality patient care (Akyürek, Sawalha, & Ide, 2015). Some hospital

managers develop strategies to reduce budgetary challenges nursing staffing, which could

affect hospitals' financial performance (Everhart, Neff, Al-Amin, Nogle, & Weech-

Maldonado, 2013). In any organization, turnover is a major concern because of the

association between the organization's reputation and the influence on the overall

organization's image (Guha & Chakrabarti, 2016). Examples of major turnover costs

include employee training and recruitment, the loss of knowledgeable and skilled employees, and lower productivity (Maqbali, 2015; Yousaf, Sanders, & Abbas, 2015). Analyzing nurses' work environments provided insight into the causes of turnover intention, which could potentially reduce turnover rates (Jernigan, Beggs, & Kohut, 2016). Retaining qualified, skilled nurses may help hospital managers maintain a stable workforce needed to ensure the delivery of quality patient care.

Problem Statement

Registered nurse turnover is costly and detrimental to healthcare organizations (Li & Jones, 2013; Richards, 2016) as nursing shortages could cause disruptions in delivering quality patient care (Chau et al., 2015). In 2017, in the United States, the nursing turnover rate was reported at 27% (Halter et al., 2017), and the replacement cost of one nurse could range from $10, 098 to $88,000 (Y. Li & Jones, 2013). The general business problem is that the replacement cost of experienced nurses affects the financial performance of healthcare organizations. The specific business problem is that some hospital managers do not know the relationship between work engagement, job satisfaction, and nurse turnover intention in hospitals.

problem is that the replacement cost of experienced nurses affects the financial performance of healthcare organizations. The specific business problem is that some hospital managers do not know the relationship between work engagement, job satisfaction, and nurse turnover intention in hospitals.

Purpose Statement

The purpose of this quantitative correlational study was to examine the relationship between work engagement, job satisfaction, and nurse turnover intention in hospitals. The independent variables include work engagement and job satisfaction. The dependent variable is nurse turnover intention. The target population consisted of a minimum of 155 registered nurses with a work history of at least 2 years, full-time work experience at their current hospital of employment in the state of New York. The implication for social change may contribute to hospital managers' understanding of some factors that may affect the intentions of nurses who leave their current employment, which could enhance the delivery of quality patient care and increase nurse job satisfaction. Identifying the underlying factors of nurse turnover intention may help to reduce actual resignations and replacement of experienced nurses, which could improve healthcare organizations' financial performance because of the associated nurse replacement costs.

Nature of the Study

For this study, I selected quantitative research as the most appropriate method to determine the relationship between variables. Quantitative research represents the best choice to compare variables to one another using numerical values and statistically based

analysis techniques (Haneef, 2013). Qualitative researchers study the subjectivity of a specific population through in-depth interviews, focus groups, by using small sample sizes (Andalib, 2016; Weaver, Crayne, & Jones, 2016). Qualitative research was unnecessary and would not significantly contribute value to the purpose of this research. A mixed methods approach incorporates both quantitative and qualitative methods (Heyvaert, Maes, & Onghena, 2013). Therefore, neither qualitative nor mixed methods were the best choice to address the research question.

I conducted a nonexperimental, correlational design to examine the relationship between variables at a single point in time. Correlational researchers prefer to examine a variety of relationships and predictions between variables (Martin & Bridgmon, 2012). When using a correlational design, researchers examine the relationship between variables from a natural observation either at one time or multiple times; whereas experimental and quasi-experimental designs employ cause and effect (Orcher, 2014). Because this study involved the predictions between variables without employing cause and effect, using experimental or quasi-experimental designs was not appropriate to meet the purpose of this study.

Research Question

RQ1: Do work engagement and job satisfaction predict nurse turnover intention at hospitals?

Hypotheses

$H_0 1$: Work engagement is not a statistically significant predictor of nurse turnover intention at hospitals.

H_a1: Work engagement is a statistically significant predictor of nurse turnover intention at hospitals.

H_02: Job satisfaction is not a statistically significant predictor of nurse turnover intention at hospitals.

H_a2: Job satisfaction is a statistically significant predictor of nurse turnover intention at hospitals.

Theoretical Framework

The theory of reasoned action fulfilled the framework for this study. Fishbein and Ajzen (1975) developed the theory of reasoned action, which posits that beliefs prompt individuals' attitudes, and behaviors. Fishbein and Ajzen explained that an individual's beliefs transform into attitudes, which might predict behavioral intentions. Ajzen and Fishbein (1980) later expanded the model to explain individuals' progression of conscious decision-making to act. Ajzen and Fishbein identified the key constructs underlying the model to include (a) beliefs, (b) attitudes, (c) subjective norms, and (d) behavioral intentions.

Other theorists used the theory of reasoned action in their research. The theory of reasoned action also suggests that behavioral intentions evolve from an individual's response performing a specific behavior (Ajzen & Fishbein, 1980). With rising organizational costs and demands to improve U.S. healthcare (Roper, Sedehi, & Ashuri, 2015), nurses have control over their behavioral intentions related to employment. The research findings of Agoi (2015) asserted that increased work engagement correlated with lower employee turnover. Also, employees who face job dissatisfaction tend to

increase turnover intention (Y. Kim & Cho, 2016). Studying the relationships between work engagement and job satisfaction helped identify beliefs that trigger nurse turnover intention. As applied to this study, the theory of reasoned action provided a lens to examine the relationships between work engagement and job satisfaction to predict nurse turnover intention in hospitals. Figure 1 is a graphical model of the theory of reasoned action as it applies to this study.
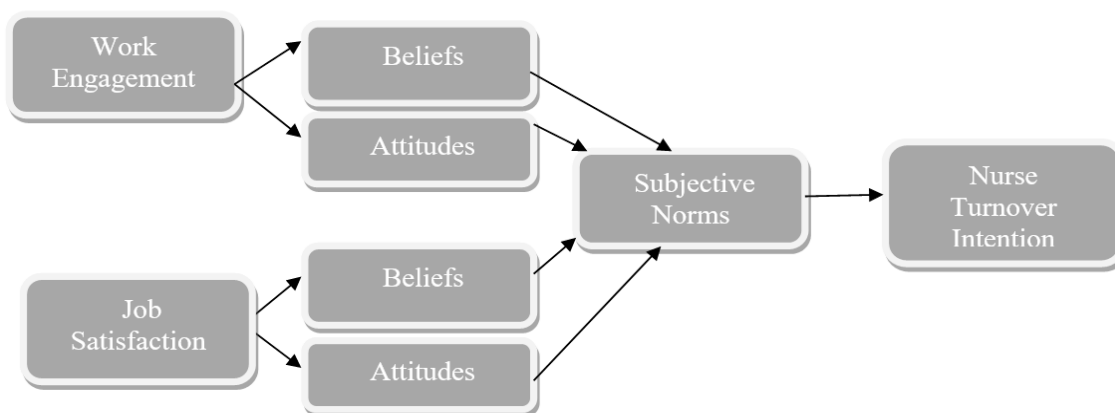
Figure 1. Graphical model of the theory of reasoned action.

Operational Definitions

Throughout this research, certain terms required explanation. Clarifying these terms may help readers' understanding. Definitions for key terms associated with this research include:

Employee Disengagement: Employee disengagement is an employee's withdrawal from role performances expressed physically, cognitively, and emotionally (Kahn, 1990).

Employee Engagement: Employee engagement is an employee's drive to enhance his or her role performances expressed physically, cognitively, and emotionally (Kahn, 1990).

Employee Retention: Employee retention involves maintaining the employment status of employees for a specific period or until task completion (Sharanya, 2016).

Turnover Intention: Turnover intention is an employee's desire to quit employment at an organization before quitting (Mobley, 1982).

Work Engagement: Work engagement is work-related enthusiasm experienced by employees driven by vigor, dedication, and absorption (Schaufeli, Salanova, González-Romá, & Bakker, 2002).

Assumptions, Limitations, and Delimitations

Assumptions, limitations, and delimitations identify features of this research that are within or without the control of the researcher. Bryman (2016) asserted that assumptions, limitations, and delimitations exist in research studies and researchers may benefit from identifying relevance, presumptions, weaknesses, and boundaries that could influence the research findings. Researchers also use these aspects to help formulate future research considerations (Bryman, 2016). Providing readers with a framework involving assumptions, limitations, and delimitations may help improve their knowledge and help clarify areas of uncertainty.

Assumptions

In the preliminary stages of a research study, the researcher formulates assumptions from partial knowledge and expectations of theory and practice (Cerniglia,

Fabozzi, & Kolm, 2016); it is also necessary to address aspects of the research study where the researcher lacks control. For example, one assumption was that participants answered honestly (see Borgström, 2012). The researcher's assumptions may be true or false, but underlie the study (Francis, 2014). My first assumption related to participants' willingness to answer survey questions honestly. The invitational letter indicated the study used strictly voluntary participation and requested honest completion of the survey questions. Assuming participants understood the notion of voluntary participation, I did not use persuasion or coercion in the study. As such, I assumed the participants would provide honest and complete responses to identify problematic issues or concerns. Assuring participants of anonymity may increase honest responses (M. Ghosh, 2015). Explaining the voluntary nature of the study would ideally result in participants providing honest answers.

My second assumption was that all participants would share the same characteristics to participate in this study. The research did not include characteristics such as (a) nonregistered nurses, (b) a registered nurse who did not work in a hospital located in New York, and (c) a registered nurse who had less experience working at the employed hospital among participants. Different characteristics could have altered the results and discredit the study's value (see Guo, Kopec, Cibere, Li, & Goldsmith, 2016). Researchers who do not recruit participants with appropriate characteristics compromise research findings (Ibrahim & Sidani, 2014). To help alleviate this problem, I emphasized the purpose of the study, required participant characteristics, and the potential contribution to the healthcare industry before participants participated in the study.

My third assumption was that I selected the appropriate methodology design (e.g., quantitative, correlational) for this study. Quantitative researchers use statistical methods to test the hypothesized relationships between variables (Haneef, 2013). Correlational designs allow the researcher to examine relationships between variables to predict an outcome (Haneef, 2013) without the assumption that the variables have a causal relationship (Sadri, 2013). Collecting data via a survey instrument provided broader access to a large population, which helped meet the requirements of this study.

Limitations

Limitations represent uncontrollable circumstances for researchers. Limitations are restrictions of knowledge by the nature of the research processes and are out of the researchers' control (Collen, 2012). The first limitation was the selection of registered nurse participants, which excluded the perspectives of other hospital staff. Although hospitals employ a variety of staff with unique perspectives on the hospital work environment, hospitals remain a prominent employment location for registered nurses (McMenamin, 2014). An exclusive focus on nurses may provide a limited perspective of the total hospital experience.

The second limitation was the inability to extend the survey period beyond one time. I conducted a cross-sectional study in which I examined a sample population, at one time, as opposed to a longitudinal study that would conduct several examinations over an extended timeframe (see Haneef, 2013). Despite the higher costs, researchers who use a longitudinal approach provide an opportunity to conduct a thorough assessment of trends

and insights (Sedgwick, 2014). As such, limited time and resources did not allow a longitudinal study.

The third limitation is for researchers to achieve validity; researchers require a specific sample size for generalization of the findings (Field, 2013). Nurse availability was a limitation. Administering a paper survey required nurses to complete the survey within a scheduled timeframe. Also, certain participants may have preferred to complete an online version rather than a paper survey because of the limited time availability and to secure anonymity. These circumstances may have affected sample size. However, large sample size does not necessarily determine validity (Bezzina & Saunders, 2014), and larger sample sizes also involve higher costs and more time (Jasti & Kodali, 2014a). Lee and Baskerville (2003) argued that a large sample size might not result in the generalization of the population, although Mohd Amir (2014) asserted that larger sample sizes produce higher reliability in the research results. Determining the appropriate sample size produces reliable research findings.

The fourth limitation involved gender and its effect on turnover intention. Female nurses and male nurses may experience different reasons why they would want to quit employment. Abubakar, Chauhan, and Kura (2014) conducted a quantitative study in Nigeria surveying 175 registered nurses, finding that males had a higher likelihood to quit their job than female nurses. The U. S. Bureau of Labor Statistics revealed that females represent 90% of the nursing field of the 2,888,000 registered nurses (U.S. Department of Labor, Bureau of Labor Statistics, BLS Reports, 2017b). In this study, female nurses

embodied the dominant gender. Given the dominance of female nurses, they overshadowed the males' perspective of why they would want to quit their employment.

In any ethical study, bias presents as a major concern for researchers as it could induce limitations. In all regards, ethical standards need to be maintained in any research study to mitigate bias (Friedman, Fireworker, & Nagel, 2017). In this study, to protect against bias, although I work in a hospital with many nurses, I did not recruit the participants from the organization where I worked. Furthermore, I did not accept a participant with whom I may have previously worked because the researcher may influence the participant's decision to participate or answer questions related to the research study (see Moy & Murphy, 2016). Emphasizing the importance of completing the survey from the participants' perspective may have helped to improve the accuracy of the data collection process.

Delimitations

Researchers choose delimitations to shape their research study. Bloomberg and Volpe (2015) defined delimitations as boundaries that researchers establish to control the scope of the study. The first delimitation of this study was that this study only included only geographical locations of New York. Because the state of New York includes numerous hospitals, I had greater access to a larger population. Gregor and Klein (2014) asserted that an inadequate representation of the population could affect the accuracy of the research findings. As such, having access to numerous hospitals assisted in acquiring a minimum sample size of 146 participants to obtain the statistical power needed to attain validity of the study.

The second delimitation included the selection of strictly registered nurses because they play a major role in hospital operations and efficiency. Although registered nurses work in various healthcare settings, for this research study they had to meet specific criteria. The inclusion criteria identify the appropriate characteristics of the targeted population (Martin & Bridgmon, 2012) to ensure alignment with the research question (Sommestad, Hallberg, Lundholm, & Bengtsson, 2014). The inclusion criteria for the recruitment of each participant were (a) employment as a registered nurse, (b) full-time employment at a hospital in New York, and (c) a minimum of 2 years work experience as a registered nurse at their current hospital of employment. McElroy and Ladner (2014) described exclusion criteria as the population whose characteristics do not meet the qualifications for the research study. The exclusion criteria excluded (a) nonregistered nurses, (b) registered nurses working in outpatient healthcare facilities, jails, or schools, and (c) registered nurses with less than 2 years working experience. Spetz (2014) noted that hospitals would continue to recruit registered nurses in preparation for the delivery of healthcare services required to care for an aging population. The third delimitation involved examining the relationship between the variables of work engagement, job satisfaction, and nurse turnover intention using the three validated instruments (Tang, 2015). Selecting validated instruments heightens the reliability for use in research studies. These delimitations outlined decisions for this research study.

Significance of the Study

The significance of this study was that the findings would heighten awareness of the effect of nurse turnover intention in hospitals. Nurses dominate the hospital workforce (Dasgupta, 2015). Because of the rising healthcare costs, nursing shortages, and turnover, healthcare organizations' leadership could face unsafe patient care environments and subsequent financial consequences (Henderson, 2015). Thus, the premise of this quantitative study was to determine whether work engagement and job satisfaction predicted nurse turnover intention in hospitals. Examining these relationships may uncover various causes of nurse turnover intention, which may help hospital managers develop strategies to retain nurses and stabilize the nursing workforce.

Contribution to Business Practice

The findings of this study may contribute to business practices for hospital managers who encounter pressure to retain a stable workforce by reducing nurse turnover intention. With the projection of nursing shortages in the United States, hospital managers' budgets could incur severe financial consequences and challenges to deliver quality patient care (Snavely, 2016). The loss of experienced nurses may cause staffing dilemmas, which result in reduced productivity and increased recruitment and training replacement costs (Biron & Boon, 2013; Flint, Haley, & McNally, 2013). Research has shown the challenges healthcare managers encounter when required to replace nurses (Dasgupta, 2015). Also, as nursing shortages increase, turnover intention also increases (O'Keefe, Brown, & Christian, 2014) as turnover is costly (Dasgupta, 2015). Identifying the underlying factors that drive turnover intention may help healthcare managers

develop strategies to prevent turnover (Dasgupta, 2014). Providing strategies to prevent

nurse turnover gives significant value to healthcare administrators and healthcare

managers who are challenged to decrease healthcare costs while maintaining a stable

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(O'Keefe, Brown, & Christian, 2014) as turnover is costly (Dasgupta, 2015). Identifying the underlying factors that drive turnover intention may help healthcare managers develop strategies to prevent turnover (Dasgupta, 2014). Providing strategies to prevent nurse turnover gives significant value to healthcare administrators and healthcare managers who are challenged to decrease healthcare costs while maintaining the stable workforce. Positive work relationships could significantly affect organizational outcomes. Identifying factors, which influence positive relationships between nurses and healthcare managers, may reduce turnover intention (Madden et al., 2015). For example, Jernigan et al. (2016) identified having supervisory and organizational support, or the lack thereof, as significant factors which could positively or negatively affect employee's commitment and work environment. Improving hospital managers' knowledge of the benefits of establishing and maintaining positive relationships with nurses may enhance organizational outcomes.

Implications for Social Change

Nurses have a significant role in the healthcare delivery process. Nurses play a vital role in the delivery of quality patient care (Burke, Dolan, & Fiksenbaum, 2014), which may help establish or reinforce positive working relationships with hospital administrators, hospital managers, peers, and enhance the experiences of patients and families. Lam, O'Donnell, and Robertson (2015) asserted that strengthening relationships between managers and employees helped to achieve a more committed workforce. A committed workforce acquired from a feeling of contentment experienced by nurses might minimize the threat of job dissatisfaction and turnover intention (Mathieu, Fabi,

Lacoursière, & Raymond, 2016). A committed workforce could stabilize the work environment, which has a significant influence on improving patient care, increasing patient satisfaction, and the experiences shared with their families, and improve job satisfaction for nurses (Burke et al., 2014). Efforts to improve the quality of healthcare could result in a healthier workforce, which could benefit the overall community (Janjua, Ahmad, & Afzal, 2014). Nurses who achieve a commitment status improve relationships and outcomes experienced by the internal and external healthcare community. Positive work relationships could significantly improve organizational outcomes. Identifying factors, which influence positive relationships between nurses and healthcare managers, may reduce turnover intention (Madden et al., 2015). For example, Jernigan et al. (2016) identified having supervisory and organizational support, or the lack thereof, as significant factors, which could positively or negatively affect an employee's commitment and work environment. Improving hospital managers' knowledge of the benefits of establishing and maintaining positive relationships with nurses may enhance organizational outcomes.

A Review of the Professional and Academic Literature

The purpose of this quantitative correlational study was to determine whether work engagement and job satisfaction predicted nurse turnover intention in hospitals. The target population included registered nurses employed in hospitals located in New York at the time of data collection. This quantitative correlational research study examined the experiences of registered nurses related to work engagement, job satisfaction, and other factors that may cause turnover intention. This review investigated the importance of

building positive relationships between hospital managers and employees and the influence on turnover intention. Studying the correlation between work engagement, job satisfaction, and nurse turnover intention may help hospital managers improve the financial health of hospitals and quality of care to patients.

Literature Search Strategy

For this literature review, the primary sources included peer-reviewed articles acquired from the following database search engines: ABI/INFORM Complete, PsycINFO, Medline, HealthSource, Nursing/Academic Edition, Psychology and Behavioral Sciences Collection, Academic Search Premier, and Google Scholar. The keywords used in this search include *work engagement*, *employee engagement*, *employee disengagement*, *intent to leave*, *intention to leave*, *intention to quit*, *job satisfaction*, *nurses*, *turnover intention*, *registered nurses*, *turnover*, and combinations of these terms. To capture the most current research for this section, I obtained 534 sources. Of the total 534 sources, 486 represented journal articles, 36 seminal books, 4 government sources, 1 dissertation, 1 test manual, and 1 survey manual. Of the total sources, 408 denoted peer-reviewed journals with publication dates between 2014 and 2018, and 82 peer-reviewed journals with publication dates before 2014.

Chronologically, the literature review begins with an expansion of the theoretical framework and its relevance to this study's research question. Also, this review includes a critical analysis of the featured topics related to theories, drivers, barriers, and outcomes of work engagement, job satisfaction, and nurse turnover intention, as well as actual

turnover. Following these topics, I concluded the literature review with a summary of the studies reviewed.

Theoretical Foundation

History

Multiple theorists have applied the concepts of the theory of reasoned action to explain human behavior. Fishbein (1963) examined the relationship between beliefs and attitudes of objects. Fishbein (1967) developed the theory of reasoned action; later, Fishbein and Ajzen (1975) and Ajzen and Fishbein (1980) expanded the model to include the relationship between attitudes and behavioral intentions. In between these revisions, Dulany's (1968) theory of propositional control, which composes of an extension from the theory of reasoned action, explained an individual's intention to perform a behavior resulting from attitudes or beliefs. These social psychologists conducted in-depth research in which they proposed various accounts to explain the motivation of human social behavior and to examine the relationship between attitude and behavior (Fishbein & Ajzen, 1975). Factors, which influence attitude and beliefs, may provide insight to steer positive behavior and interrupt negative behavioral intention.

Human social behavior evolves from an individual's beliefs and attitudes. Ajzen and Fishbein (1980) modified the theory of reason action by asserting that the progression of conscious decision-making toward an action stemmed from the interrelationships of beliefs, attitudes, subjective norms, and behavioral intentions, all of which collectively predict behavior. Ajzen and Fishbein explained that beliefs influence an individual's perceived outcome, which results from a positive or negative attitude or

belief, influences behavior to engage or disengage. Ajzen and Fishbein asserted that behavioral intentions, to engage or disengage, predict behavior. Also, subjective norms reflect a social influence to carry out the behavior associated with the intent (Ajzen & Fishbein, 1980). These theorists explained how behavior and attitudes affect decision-making activities.

The theory of planned behavior reflects an extension of the theory of reasoned action. Ajzen (1985, 1991) proposed the theory of planned behavior to address issues of perceived behavioral control, which was absent from Fishbein and Ajzen's (1975) theory of reasoned action. The theory of planned behavior advanced the concept of Fishbein and Ajzen's theory of reasoned action by including perceived behavioral control as another factor that influenced behavior and behavioral outcomes. Perceived behavioral control refers to the level of subjective participation in a specific behavior (Wu, 2015). Also, the theory of planned behavior considers demographics, personality, internal, and external factors to influence behavioral beliefs (Ajzen, 2005). These factors differentiate from the theory of reasoned action.

Various researchers studied the effect of planned behavior on behavioral intentions. For example, Wu (2015) conducted a quantitative study, in all, 200 undergraduate students completed surveys to understand the relationship between behavioral intentions and their participation in aquatic sports. Mascherek, Gehring, Bezzola, and Schwappach (2015) conducted a quantitative, cross-sectional study consisting of 866 healthcare professionals in Swiss hospitals to investigate the relationship between attitudes, norms, perceived behavior control and their intentions to

use a surgical safety checklist. Wu found that perceived behavioral control had a significant and positive relationship on behavioral intentions. In contrast, Wu found that attitudes and subjective norms do not have a significant and positive relationship with behavioral intentions potentially do undergraduates level of autonomy. However, different occupations may produce different outcomes. Unlike Wu, Mascherek et al. found that managerial employees have a more significant and positive relationship with intent toward using a surgical checklist than nonmanagerial employees. Mascherek et al. asserted that perceived behavior control and situations drive behavior. Therefore, understanding and analyzing individuals' perceived behavioral control, as well as other factors, provided further insight to explain the prediction of behavioral intentions and behaviors.

Components

The theory of reasoned action underwent a series of modifications to reveal the influence of subjective norms on human behavior. The theory of reasoned action aspires to explain and predict individuals' behavioral intention emerging from beliefs and attitudes. Ajzen and Fishbein (1980) extended the theory of reasoned action to incorporate components of individuals' beliefs, attitudes, subjective norms, and behavioral intentions to determine a specific behavior, or not. Subjective norms are the beliefs about the social environment and whether to show a particular behavior (Ajzen, 1991). Ajzen and Fishbein asserted that specific behaviors evolve from the individual's free will, based on two types of beliefs: (a) attitudes developed through beliefs regarding the potential consequences of a particular behavior, and (b) behavior resulting from

subjective norms. Subjective norms are the beliefs about the social environment and

whether to demonstrate a specific behavior (Ajzen, 1991). For example, Namagembe,

Sridharan, and Ryan (2016) conducted a quantitative study, which consisted of 200

owners of small and medium-sized manufacturing enterprises in Uganda to analyze the

influence of green chain practice adoption. Based on the theory of reasoned action,

Namagembe et al. found a significant and positive relationship existed between an

individual's attitude and the adoption of green chain practices. Also, subjective norms

also influenced the adoption of green chain practices. Attitude, behavior, and subjective

norms may influence an individual's beliefs to produce and comply with behavioral

intent.

Individuals' level of control can affect behavior intentions. Ajzen and Fishbein

(1980) asserted that the perception of others influences individuals' behavioral intent to

perform actions. The theory of reasoned action provides an ideal model when individuals

have control of their behavior, yet the strength of the model diminishes when individuals

lack control (Yu-Cheng, Yi-Fang, & Guo, 2013). Individuals' control over own behavior

determines the progression of their behavioral intentions.

Identifying weaknesses provides insight into the theory's limitations. Ajzen and

Fishbein (2005) asserted that the theory of reasoned action lacked consideration for

emotion as well as its influence on behavioral intentions and actual behavior. Also, when

applied, the theory does not isolate variables to detect which variable has more

significance in predicting behavior (Ajzen & Fishbein, 2005). Ajzen (1985) asserted that

some individuals might have control over specific factors, which may inflict a positive or

negative influence on their behavior. Individuals may alter their behavior based on influences. Therefore, Cianfrone, Zhang, Pitts, and Byon (2015) emphasized the importance of acquiring appropriate information, which could affect influences on the behavior. Although the theory of reasoned action has strengths and weaknesses, this theory was appropriate for the use in the current study.

Reasoned Action Theory Used in Research Studies

In the current study, I used the reasoned action theory as the theoretical framework. Many research studies have included the theory of reasoned action (Hinz & Nickell, 2015; McClung & Rynarzewska, 2015; Memarzadeh, Blum, & Adams, 2015). The theory of reasoned action specifies that attitudes formed by individuals' behavioral beliefs influence specific behavior (Fishbein & Ajzen, 2010), which promotes decision-making efforts (Shamim & Ghazali, 2015). Moreover, various researchers included the theory of reasoned action to examine relationships between individuals and intentions to perform some specific behavior.

The theory of reasoned action can also affect purchasing intentions. Aldhmour and Sarayrah (2016) conducted a quantitative study, which involved 230 consumers who resided in the South of Jordan, to examine the relationship between factors that influence the intention to shop online. Aldhmour and Sarayrah found that subjective norms and positive attitudes have a strong and direct influence on consumers' intent to online shop. McClung and Rynarzewska (2015) conducted a quantitative study, which consisted of 726 Mercer University students in Macon Georgia, to examine the purchase intentions of a new college football program. Memarzadeh et al. (2015) conducted a quantitative

study, which involved 275 business travelers' perspectives in the United States, to

examine the relationships between attitudes combined with positive and negative e-

comments and intention to purchase. Memarzadeh et al. (2015) found that both positive

comments and negative comments were both affected the purchase intention of a hotel

room. Like the findings of Aldhmour and Sarayrah (2016), McClung and Rynarzewska's

(2015) revealed that students' attitudes stimulated their peers' viewpoints. These

researchers found that attitudes had a significant positive effect on determining their

intent to purchase a Division I football program. However, Memarzadeh et al. determined

that neither positive nor negative comments predicted business travelers' purchase intent.

These researchers' findings reinforced the constructs of the theory of reasoned action,

which stressed the influence of attitude and subjective norms and behavioral purchasing

intent.

Other researchers studied the intention to adopt new techniques and the theory of

reasoned action. Ko, Pei, and Tsai (2016) conducted a quantitative study, which involved

458 hotel employees, from Taiwan, to examine the correlation between behavioral intent

and adoption of information technology. Ko et al. determined self-efficacy and subjective

norms had a relationship with behavioral intention to adopt information technology. In

another similar quantitative, nonexperimental study conducted Al-Ajam, and Md Nor

(2015), which involved 1,286 bank patrons from Yemen in examining the relationship

between factors that would influence the adoption of Internet banking. Both, Ko et al. and

Al-Ajam and Md Nor found a positive relationship between perceived beliefs and

attitude. Unlike Ko et al., Al-Ajam and Md Nor discovered that attitude and subjective

norms included customers' intention to adopt Internet banking. These researchers found that training heightened the intent to adopt technology techniques in both the banking and hotel industries of employees and customers. With these two examples, the findings of attitude and subjective norms have shown the influence of the theory of reasoned actions and its effect on intentions.

Various researchers determined that the theory of reasoned action helped to disclose the behavior of employees at work. Hinz and Nickell (2015) conducted a quantitative study of 180 nonmanagerial poultry processing workers from Kansas to examine the correlation between reasoned action and job attitudes to predict the production of safe food. Hinz and Nickell found that job attitudes, which consisted of job satisfaction, job involvement, and organizational commitment, had a direct and positive effect on the intentions of engaging in food safety behaviors. Like the quantitative, cross-sectional study of Aliche (2013) which consisted of 147 lab workers from Nigerian hospitals, to examine the relationship between predicting factors and behavioral intention to reduce needlestick injuries. In contrast to Hinz and Nickell's findings, Aliche did not find a significant relationship between compliance intentions to reduce needlestick injuries. Educational strategies and other factors may have contributed to the adoption of precautionary measures. Some individuals' behavior may require other factors to influence their behavioral intentions.

The Appropriateness of the Theory of Reasoned Action for this Study

The theory of reasoned action served as the basis for this research study. The principles of Ajzen and Fishbein's (1980) theory of reasoned action focused on

individuals' beliefs and attitudes, which predicted a specific behavioral intention. Work engagement is a work-related enthusiasm experienced by employees driven by vigor, dedication, and absorption in their work (Schaufeli et al., 2002). Beliefs of employees and the degree of engagement drive behavioral intentions. Turnover intention refers to an employee's desire to quit employment at an organization before quitting (Mobley, 1982). Examining the relationship between work engagement, job satisfaction, and nurse turnover intention may identify the beliefs or attitudes that trigger nurse turnover intention because turnover has a crippling effect on hospital organizations. Azanza, Moriano, Molero, & Lévy Mangin (2015) conducted a quantitative study by surveying 623 employees at the Spanish University for Distance Education to examine the relationship between authentic leadership, work-group identification, and work engagement. Azanza et al. found that work engagement and work-group identification had a significant and negative influence on turnover intention. Another example found in Lu, Lu, Gursoy, and Neale's (2016) quantitative study of 859 hotel supervisors and line-level employees, investigated the relationship between work engagement, job satisfaction, and turnover intention. Consistent with the findings of Azanza et al., Lu et al. found that work engagement negatively influenced turnover intention.

Similarly, work engagement had a significant and positive influence on job satisfaction. Although literature exists that focuses on the potential benefits of work engagement and nurses in healthcare organizations, at the time of data collection for this study, the literature was limited regarding work engagement and nurse turnover intention.

Therefore, aligning the variables of work engagement, job satisfaction, and turnover intention may reveal underlying factors that could prevent nurse turnover intention.

Competing Theories of Employee Behavior and Attitudes

The relationship between managers and employees and employees amongst their coworkers affects behavior. Hormans (1958) conceptualized the social exchange theory (SET) as a social behavior involving an exchange process. Blau (1964) expanded the concept to explain the voluntary actions of reciprocation between managers and employees motivated by individuals' anticipation of receiving intangible and tangible rewards that result in an obligation to return the favor. The SET affects employees' attitudes toward managers and organizations. Giauque (2015) conducted a quantitative study evaluating 720 middle managers from five public hospitals in Switzerland to correlate the relationship between positive attitudes and change. Giauque found a significant and positive relationship existed between perceived work relationships with supervisors and coworkers and perceived organizational support on a positive attitude toward change. Positive support and treatment from both the organization and its managers tend to enhance attitudes and relationships to stimulate a reciprocal obligation from employees as long as the rewards represent a fair exchange between managers and employees (Y. W. Kim & Ko, 2014). Negative reciprocity could also impose employees negatively affecting levels of cooperation (Gilliam & Rayburn, 2016). Therefore, organizational leaders need to promote positive support to improve employees' motivational behavior toward developing social relationships.

The Leader-Member Exchange (LMX) theory and the SET provide different perspectives on the relationship between managers and employees. Dansereau, Graen, and Haga (1975) designed LMX from the framework of the SET, in which leaders formed different relationships with subordinates. SET and LMX theories provide insight into employee behaviors (Covella, McCarthy, Kaifi, & Cocoran, 2017). The SET and the LMX both promote relationships with managers and employees (Covella et al., 2017). Nonetheless, the SET promotes positive working relationships between leaders and employees built on trust, whereas the LMX theory posits that high-quality relationships exist with a select group of employees and low-quality relationships exist with other employees (Cho & Poister, 2014). Peng and Lin (2016) explained that trust fostered high-quality relationships, which provide employees with expanded opportunities and benefits. These authors continued that low-quality relationships limited opportunities and benefits because of the formal nature of the employee-supervisor relationship (Cho & Poister, 2014; Peng & Lin, 2016). Saks (2006) found that SET correlated with engagement levels. Because different relationships exist between supervisors and organizations, these relationships may trigger different employee behavioral outcomes (Furunes, Mykletun, Einarsen, & Glaso, 2015). M. Malik, Wan, Ahmad, Naseem, and Rehman (2015) found that employees who have high-quality relationships with their supervisor may experience reduced turnover, although employees with a low-quality relationship may experience greater turnover intention. Employees represent a major resource to managers and organizations. Building strong positive relationships with all employees, rather than being selective, would help improve employee behaviors to achieve organizational goals.

The State of Nursing Affairs

Without nurses, the healthcare delivery system would collapse. Therefore, nurses are a vital component in the delivery of patient care (Burke et al., 2014). In the United States, many nurses work in hospitals, and they face significant demands with minimal resources (Mullen, 2015). The demands respond to an aging population, the increase in chronic diseases, and people living longer (Maurits, de Veer, van der Hoek, & Francke, 2015). Snavely (2016) asserted that the demand for nurses might exceed the availability, causing a significant shortage in the United States. Burke et al. reported that nursing shortages stemmed from nurses' job dissatisfaction and turnover. Snavely identified that the reasons for shortages included retirement-aged nurses, nurses leaving the profession because the difficult nature of the job, the decrease in nurses enrolled in nursing schools, and the aftermath of an economic recession. Globally, the economic recession caused organizations to implement cost-reduction strategies (Phua & Hue, 2015). In the healthcare industry, these cost-reduction strategies adversely affected nurses' staffing levels and benefits, as well as reducing interest in pursuing a nursing career (Phua & Hue, 2015). With the awareness of a projected nursing shortage, hospital managers need to focus on implementing strategies to reduce nursing shortages and turnover to maintain a stable workforce.

Work Engagement

Various researchers conducted studies on engagement. Although, some scholars conducted studies on engagement (Blomme, Kodden, & Beasley-Suffolk, 2015), others focused on employee engagement (Rana, Ardichvili, & Tkachenko, 2014). Often,

researchers used the terms work engagement and employee engagement interchangeably (Gupta, 2015; Tejpal, 2015). Schaufeli (2013) described work engagement as an employee's relationship with his or her work, whereas Jeve, Oppenheimer, and Konje (2015) suggested that employee engagement relates to the process of an employee's involvement with the organization. Notably, each concept represents a different theoretical perspective. Although, a discussion included the origin of employee engagement, work engagement as the focus of this research study.

Theories of Work Engagement

A review of the literature revealed several distinct concepts of engagement. Katz and Kahn (1966) addressed the notion of achieving organizational goals through the interaction of role functions. Later, Kahn (1990, 1992) formulated the personal engagement theory (PET), which posits that an individual may exert personal engagement or disengagement in task behaviors and performances. Kahn suggested that the physical, cognitive, and emotional energy either stimulated or dampened an individual's personal engagement or disengagement. Kahn also noted personal engagement theory and the social engagement theory shared similarities, evolving from a reciprocal obligation in which employees exchange positive job attitudes and behaviors toward building relationships. Kahn contended that meaningfulness, safety, and availability are significant underlying psychological conditions that influence an employee's level of work engagement and role performance. Following Kahn's theory, Maslach and Leiter (1997) introduced the concept of work engagement, referring to a high-energetic connection with an employee's job, reflecting the opposite of burnout.

Maslach and Leiter asserted energy, involvement, and professional efficiency represent to work engagement and exhaustion, cynicism, and ineffectiveness represent burnout. Primarily, Maslach and Leiter focused exclusively on the human service industry but later expanded the concept to include all industries. Saks (2006) asserted that engagement affects employees' attitudes, behaviors, and intentions that affect organizational outcomes. With these varying interpretations of engagement and the benefits and consequences at risk, it is necessary to clarify the concept of work engagement.

The concept of work engagement has a direct outcome on work tasks*.* Schaufeli et al. (2002) identified vigor, dedication, and absorption as the characteristics that drive employees' actions at work. According to Schaufeli et al., vigor relates to a high-energetic enthusiasm and determined state of mind; dedication refers to a deep psychological loyalty between the employee and work tasks, and absorption represents an intense state of involvement with work tasks in which time to complete tasks does not matter. Employees who exhibit characteristics of enthusiasm and self-pride tend to view challenges as opportunities (Blomme et al., 2015). Although different concepts exist, Ahmed, Majid, and Zin (2016) credited Schaufeli et al.'s definition of work engagement as the most popular theory of work engagement. Overall, work engagement represents an important aspect requiring further investigation, as many factors drive or disrupt the progress of work engagement.

Drivers and Barriers to Work Engagement

Organizational trust. Organizational trust affects work engagement as shown by various researchers. Koçak (2016) described organizational trust to consist of trust

between supervisors, coworkers, and management. According to the social exchange theory (Blau, 1964), when an exchange occurs between individuals, an obligation ensues to reciprocate. For example, Gülbahar (2017) conducted a quantitative, correlational study, which involved 559 elementary school teachers in Turkey, to examine the relationship between organizational trust and work engagement. Gülbahar found that a significant and positive relationship existed between organizational trust and work engagement. As these authors have shown, the more trust an employee has in his or her employer, the more loyal he or she is to stay in the organization.

As shown by previous studies, trust is vital in the employee-employer bond. With a higher degree of trust, the more entrenched an employee may become with work (Koçak, 2016) the possibility of increasing work engagement (Ugwu, Onyishi, & Rodríguez-Sánchez, 2014). Low organizational trust adversely affects organizational commitment and the stability of an organization (Chen et al., 2015). For example, Marasi, Cox, and Bennett (2016) conducted a quantitative survey, which involved 353 nurses from the United States, to examine organizational trust and deviant workplace behavior. Marasi et al. found that the lack of organizational trust directly resulted in unacceptable employee behaviors. Alfes, Shantz, and Alahakone (2016) conducted a quantitative study, which consisted of 335 Human Resource employees in the United Kingdom, to examine the relationship between organizational trust and person-organization fit, and the influence on work engagement. Unlike Marasi et al., Alfes et al. found that a positive relationship existed between work engagement, person-organization fit, and

organizational trust. Thus, organizational trust may lead to significant positive outcomes and implications for achieving organizational goals and success.

Organizational trust may also associate positively with the development of trusting relationships between managers and organizations. Supervisors who maintain fairness in the decision-making process and the treatment of employees establish a level of trust (Rao & Pearce, 2016). Supervisors have a significant opportunity to improve relationships with subordinates, which leads to increase employee commitment and worker engagement (Seifert, Brockner, Bianchi, & Moon, 2016). Mishra and Kumar (2017) conducted a literature review to investigate the relationship between organizational trust, psychological contract, work culture, workplace diversity, turnover intention, and work engagement. Mishra and Kumar found a significant and positive relationship existed between work engagement and organizational trust. Also, a negative relationship existed between organizational trust and turnover intention. As such, an employee's trust in management may result in an increased work contribution and performance levels (Ye & King, 2016). Seifert et al. (2016) asserted trust constituted a critical component of the relationship building between employees and management; this relationship also influenced a committed workforce. Coxen, van der Vaart, and Stander (2016) noted that the healthcare industry reflected an absence of trust in leadership. In hospitals, a lack of trust could pose a significant negative effect on the work environment for all levels of staff, particularly nurses (Aly & El-Shanawany, 2016). Meaningful relationships between employees and managers may establish organizational trust and may elevate work engagement to sustain healthcare environments.

Distrust could erode relationships and outcomes. In contrast, Kujala, Lehtimäki, and Puctait (2016) asserted that in some instances, distrust might enhance relationships. For example, Kujala et al. conducted a case study, which consisted of 3500 employees in a Nordic country, to analyze trust and distrust and the link between organizational culture and organizational ethics. Kujala et al. found that different aspects of trust and distrust could either create positive or negatively affect organizational culture. Further, the researchers indicated that a negative situation might provide an opportunity for management to transform distrust into a trusting environment. Morrison and Macky (2015) suggested that low cooperation stemmed from poor relationships, which may lead to distrust causing disengagement. These researchers showed the different aspects of trust and distrust with employees.

Regarding work engagement, trust is vital. Aly and El-Shanawany (2016) conducted a quantitative and cross-sectional, correlational study, to examine organizational trust, which consisted of 236 nurses who worked in 14 critical care and toxicology units within the Alexandria University hospitals, located in Egypt. Aly and El-Shanawany found relationships built on trust with colleagues and supervisors resulted in delivering quality of care to patients and a positive attitude toward change. Smollan (2013) conducted a qualitative study through semistructured interviews, which included 24 employees representing different organizations, to investigate the perspectives of employees' trust in their supervisors, senior management, and the organization, during organizational change. In contrast to Kujala's et al. findings, Smollan's findings revealed that distrust triggered high turnover, stress, and lack of commitment toward change. Also,

distrust negatively affected employees' productivity (Coxen et al., 2016). In a similar

quantitative study, which involved 715 Nigerian bank employees, Ugwu et al. (2014)

examined the correlation between organizational trust, psychological empowerment, and

work engagement. Like Aly and El-Shanawany, Ugwu et al. found that organizational

trust predicted work engagement. Employees who trust their organization tend to have a

greater desire to cooperate, whereas employees who distrust the organization are more

likely to resist cooperation (Chang, Liu, & Lin, 2015). Removing barriers, which disrupt

trust, may contribute significant positive outcomes to attain organizational goals to

sustain a positive work environment.

Work environment. Work environment plays a vital role in influencing work

engagement. Work environment refers to the physical, psychological, and social elements

of a work atmosphere that may affect the product and performance of employees from

either a positive or negative (Agbozo, Owusu, Hoedoafia, & Atakorah, 2017). Consiglio,

Borgogni, Di Tecco, and Schaufeli (2016) suggested establishing relationships at work

could help foster a positive work environment to enhance work engagement. Work

environments reflect high or low levels of work engagement, as well as burnout (Huhtala,

Tolvanen, Mauno, & Feldt, 2015). Employees, who experience burnout, in the work

environment, endure stress and exhaustion, which could jeopardize their work

contribution, as well as their health (Rozman, Treven, Cancer, & Cingula (2017).

Supportive work environments may stimulate higher levels of engagement (Anitha, 2014)

and establish a connection with positive outcomes (Linz, Good, & Busch, 2015).

However, inadequate supply of resources may suppress employees' work engagement in

stimulating work environment settings (Selander, 2015). One consequence of unfavorable work environments is that it fuels employees' intentions to leave (Markey, Ravenswood, & Webber, 2015) and, thus, adversely affects work engagement. Negative perceptions of an employee's work environment diminish levels of commitment and job satisfaction, which, in turn negatively affect productivity (Jernigan et al., 2016). The presumption is that organizational outcomes depend heavily on employees' perceptions of a positive environment. Therefore, the anticipated stimulation, from a positive work environment, has the advantage of increasing work engagement necessary to achieve organizational outcomes.

  Employee relationships between supervisors. Employee relationships between supervisors promote benefits and challenges to organizations. Matta, Scott, Koopman, and Conlon (2015) conducted a quantitative study, which included 280 employees and supervisors at a Midwestern University, to examine the relationship between employee and supervisors on work engagement and organizational citizenship behavior. Matta et al. found that work engagement yielded higher results for employees when they had high-quality relationships with their supervisors. Radstaak and Hennes (2017) conducted a quantitative study, which consisted of 402 mail and parcel employees in the Netherlands, to examine the relationship between leader-member exchange, job crafting, and work engagement. Job crafting refers to altering the type, quality, and the interrelationship of a job for the convenience of the employee (S. Lee, Shin, & Baek, 2017). Like Matta et al.'s study, Radstaak and Hennes found that a positive relationship existed between high-quality relationships with their supervisors and work engagement. Organizations absorb

the consequences of poor quality relationships, which jeopardize employee loyalty. For instance, Vera, Martínez, Lorente, and Chambel (2016) conducted a quantitative, correlational study, which included 313 Portuguese nurses to examine the relationship between job resources and work engagement. Vera et al. found that supervisors' social support, specifically providing job autonomy, had a significant and positive relationship with work engagement. These authors emphasized the importance of positive employee relationships with supervisors.

When discussing the role of a supervisor, researchers can benefit from considering both genders with employees and show the effectiveness of providing autonomy helps to build positive relationships especially in nursing wherein the population consists of mostly the female gender. George (2015) conducted a quantitative study, which included 138 professional workers in the United Kingdom, to evaluate employee retention. George found autonomy and social support revealed the highest significance to enhance positive relationships resulting in employee retention within an organization. Both Vera et al. and George emphasized the importance of positive relationships between employees and their supervisors, noting that it may lead to increased levels of work engagement and offer extensive benefits to supervisors and organizations alike. Unlike Matta et al. (2015) and Vera et al. (2016); Suan and Nasurdin (2016) conducted a quantitative study, which consisted of 438 customer-contact hotel employees in Malaysia, to examine the influence of supervisor support and the role of gender in work engagement. These results differentiated between the researchers' findings, which revealed a significant and positive correlation with male employees and

work engagement compared to female employees. Suan and Nasurdin attributed these findings to males' perceptions of social support as a mechanism for career advancement, whereas female employees may feel ignored by their supervisor. Therefore, leaders of organizations may benefit from understanding the importance of developing and maintaining positive relationships with employees and supervisors as it pertains to achieving organizational goals.

Employees' sense of pride and value. Any good manager can recognize that a satisfied employee yearns for a sense of pride and self-esteem to remain on the job. Establishing a sense of pride promotes an employee's effort toward contributing value to an organization (Butler, Armstrong, Ellinger, & Franke, 2016). Further, feelings of value and appreciation may help increase employee productivity and job satisfaction (White, 2015b). White identified communication as a key method for employees feeling valued. Cullen and Gordon (2014) noted that feeling valued heightens relationships, increases productivity and beyond expectations. Employees also sense a feeling of value when organizational leaders recognize their contributions and offer continuous career development (van Harten, Knies, & Leisink, 2016). In contrast, employees who feel devalued may experience negative outcomes related to dissatisfaction, higher incidences of tardiness, absenteeism, poor working relationships, and actual turnover, all of which are costly to an organization's survival (White, 2015a; White, 2015b). Therefore, it is beneficial for organizations to keep employees happy, although they may find it challenging to identify those aspects that could improve job satisfaction.

Establishing positive relationships with employees has an invaluable influence in the workplace. Shantz, Alfes, and Arevshatian (2016) conducted a quantitative study, which involved 42,357 nurses and 26,661 administrative support workers acquired from the 2011 NHS National Staff Survey, to examine the relationship between work engagement, human resource management (HRM) practices, and the delivery of quality of care. Regarding nurses, Shantz et al. found a positive relationship existed between participation in decision-making and work engagement, as well as a substantial and positive relationship, existed between work engagement and quality of care and safety. Also, a significant and positive relationship existed between communication and safety.

With the administrative support staff, Shantz et al. found work engagement and communication significantly and positively related to the quality of care and safety.

Nonetheless, work engagement did not reflect a relationship with quality of care. Overall, the nurses had a higher level of work engagement than administrative staff. Toode, Routasalo, Helminen, and Suominen (2015) conducted a quantitative, cross-sectional study, which involved 6,235 hospital nurses from Estonia, to examine the relationship between the perceptions of workplace characteristics, work motivation, and patient safety. Toode et al. (2015) found a positive relationship existed with supportive working conditions and nurses' intrinsic motivated. Like Shantz et al., Toode et al.'s finding revealed a strong relationship between communication and collaboration amongst various relationships. Establishing collaborative relationships reflect an essential mechanism to improve working conditions and patient outcomes. Providing supportive

working conditions and communication may elevate employees' perception of their sense of value, which may improve engagement and work-related outcomes.

Employees who experience a valued connection may see higher levels of work engagement, which may result in increased organizational productivity. In contrast, organizational leaders who create a negative work environment may ignite alienation and disengagement, thereby affecting the commitment to achieving the organization's goals (see Tan, 2016). To affect work engagement positively and increase productivity, organizational leaders need to establish a sense of value to strengthen connections with employees.

Work Engagement, Workaholism, Burnout, and Outcomes

Depending on the level of work engagement, both positive and negative effects on employees may exist, as shown by three different studies. In an older study, Schaufeli, Taris, and van Rhenen (2008) defined workaholism as an inner compulsive drive to work hard. In a more recent study, Gorgievski, Moriano, and Bakker (2014) conducted a quantitative study, which involved 180 Spanish entrepreneurs, to differentiate work engagement from workaholism and the effect on high performance. Gorgievski et al. found that although work engagement and workaholism shared similarities, such as determination and excitement, dissimilarities of work performance occurred. Like Mazzetti, Schaufeli, Guglielmi, and Depolo's (2016) quantitative study, which consisted of 791 employees from various organizations, to examine the relationship between the work environment, working hard, workaholism, and work engagement. Mazzetti et al. found a negative relationship existed between the lack of recognition through rewards for

overwork and work engagement. Conversely, the findings revealed a positive relationship existed between overwork and workaholism triggered by job demands. The results of Gorgievski et al.'s study revealed that work engagement had a direct correlation with achieving higher performance and positive outcomes while workaholism related more closely to negative outcomes. Regarding workaholism, although these authors agreed on promoting work engagement and performance, only the latter discussed the benefits of a healthy environment for employees.

Failure to recognize warning signs of workaholism may result in burnout, which can disrupt employee outcome. Burnout may result in negative work outcomes and can be associated with the opposite of work engagement (Schaufeli & Bakker, 2004b). Chirkowska-Smolak (2012) conducted a quantitative study, which involved 993 Polish workers from various companies, to correlate the relationship between burnout, work engagement, and work environment. Chirkowska-Smolak found a direct and positive relationship existed between levels of resources, the intensity of job demands on the outcomes of both work engagement, and burnout. To support Chirkowska-Smolak's study, Bakker and Demerouti (2014) used the Job Demand-Resource model for predicting the level of work engagement or burnout employee experiences, as well as the correlation between job demands and job resources. Bakker and Demerouti found that sufficient resources and demands fulfilled job tasks about work engagement, and limited resources heightened job demands, which resulted in exhaustion and burnout. Chirkowska-Smolak recognized insufficient resources could result in burnout or motivation, depending on the recognition the employee received from his or her

supervisor. Establishing a balance between the supply of resources and demands on employees may stimulate a healthy work environment.

Burnout can negatively affect employees who work in organizations across all sectors. In the healthcare industry, for example, there are significant levels of nursing shortages; the result has revealed burnout and job dissatisfaction with employed nurses (H.-F. Lee, Yen, Fetzer, & Chien, 2015). Also, burnout jeopardizes the financial stability of the healthcare industry (Henderson, 2015). H.-F. Lee et al. conducted a quantitative study, which consisted of 1,846 nurses in 35 Taiwanese hospitals, to examine the relationship between individual and situational factors and burnout. H.-F. Lee et al. found that demographic factors, such as age, marital status, geographical location, and hospital type have a significant and positive effect on the level of burnout experienced. For example, findings revealed that younger nurses experience more exhaustion and burnout than older nurses. In a similar quantitative study, which included 735 physicians and nurses located in Turkey, researchers Tosun and Ulusoy (2017) examined the correlation between organizational commitment, vocational satisfaction, and burnout. Like the study of H.-F. Lee et al., Tosun and Ulusoy found a direct and negative correlation existed between increased age and burnout. In contrast, a positive correlation existed between increased age and personal accomplishment. Tosun and Ulusoy asserted that enhanced social support might help decrease levels of burnout among older nurses. Schaufeli et al. (2008) proposed that both work engagement and burnout could both produce negative outcomes and that effective management of burnout can reduce costs

for organizations. Awareness of the various negative work-related outcomes of burnout can motivate managers to develop reduction.

Burnout can affect organizational productivity and stability at all levels. Henderson (2015) asserted that burnout results in lower productivity levels, and increased absenteeism and turnover; it can even compromise the lives of patients. In a quantitative, correlational study, which consisted of 179 information technology workers in Pakistan, Harris (2016) examined the correlation between burnout and project success. Project success refers to the collaboration of a team to achieve a projected goal within a specific timeframe and resource limitations (Harris, 2016). Harris found a negative relationship existed between work engagement and burnout. Also, Harris found that work disengagement had a negative relationship with achieving project success attributed to burnout. Hamdan and Hamra (2017) conducted a quantitative, cross-sectional study, which included 444 healthcare workers (nurses, physicians, and administrative personnel) in Palestine, to examine the relationship between burnout, workplace violence, and job turnover. Consistent with Harris' findings of burnout and negative outcomes, Hamdan and Hamra found burnout had a significant and positive relationship with turnover intention. Anitha (2014) proposed improving the work environment could enhance work engagement and prevent burnout. Managers' recognition of the different factors and levels of work engagement may help reduce the consequences of workaholism, burnout, and turnover intention.

Work engagement is important to the success of organizations and will require further investigation, as many factors promote work engagement. Although differing

concepts of work engagement exist, service climate, job satisfaction, and commitment

serve as a prelude to achieving enhanced work engagement with the potential to increase

organizational success (Barnes & Collier, 2013). Service climate refers to a customer's

perspective of an employee's performance in shaping a positive experience that may

influence customers' loyalty (Javed & Cheema, 2015).

Chirkowska-Smolak (2012) contended that similar factors, which might influence

work engagement, and trigger burnout. This concept, which relates to work engagement,

could also relate to nurses and nurse burnout. Shoorideh, Ashktorab, Yaghmaei, and

Alavi Majd (2015) conducted a quantitative study, which included 159 intensive care

nurses in Iran, to examine the relationship between moral distress, burnout, and

anticipated turnover. Shoorideh et al. found a positive relationship existed between age,

nursing experience, nurse-to-patient ratio, and moral distress and burnout. These findings

revealed that although these factors may lead to moral distress and burnout, because

specialized skills of ICU nurses, their level of moral distress and burnout may lead to

turnover intention, not turnover. Van Bogaert et al. (2017) conducted a mixed method

and cross-sectional study, which included a total of 751 nurses from one hospital in

Holland, and the second hospital in Belgium to examine the relationship between nurse

practice environment, burnout, and work engagement. Also, the researchers evaluated

nurses' and nurse managers' perceptions of nurses' workloads. Like, Shoorideh et al.,

Van Bogaert et al. found the nurse practice environment had a significant effect on job

outcomes, quality of care, and burnout. However, Van Bogaert et al. also determined an

indirect relationship existed between organizational support, workload, and work

engagement. Therefore, identifying factors and barriers of burnout and work engagement may help managers develop strategies to reduce burnout and improve work engagement to create a productive work environment.

Job Satisfaction

For the success of an organization, employees desire to experience job satisfaction. Spector (1997) defined job satisfaction as an employee's level of satisfaction or dissatisfaction with employment. In the 1930s, the concept of job satisfaction originated (Kianto, Vanhala, & Heilmann, 2016). The higher level of satisfaction achieved a higher level of performance (Linh, Jin, Kiong, & Fah, 2016). A consequence of dissatisfaction results in negative outcomes such as increased absenteeism, low productivity, and organizational commitment (George & Zakkariya, 2015) and grievances (Locke, 1976). Many definitions, theories, causes, factors, barriers, and consequences exist, which convey different perspectives of job satisfaction, which influences employees and organizations.

Theories of Job Satisfaction

Motivation may drive job satisfaction. Maslow's (1943) hierarchy of needs categorizes a human' pursuit of motivation in a sequential order of fulfillment, which includes the need for (a) physiological demands, (b) safety, (c) belonging, (d) esteem, and (e) self-actualization. Maslow emphasized that each need served as motivation to achieve the next tier. Although each category describes a specific need, Maslow noted that physiological needs, such as food and shelter, serve as significant motivators in comparison to other needs. Herzberg developed the two-factor theory, an extension of

Maslow's theory, in which he theorized that motivator and hygiene factors had a direct

effect on job satisfaction and dissatisfaction (Herzberg, Mausner, & Snyderman, 1959).

Motivator factors contain high achievement and work responsibilities that influence

satisfaction, whereas hygiene factors feature elements beyond the employee's control,

such as compensation and interaction with supervisors, that may interfere with

satisfaction potential (Wilson, 2015). For example, when there is dissatisfaction with an

individual's job, the resolution does not guarantee satisfaction (Gov, 2015). Maslow's

hierarchy of needs and Herzberg's two-factor models established the foundation for

numerous scholars to compare and contrast the many factors that affect job satisfaction.

Regarding job satisfaction, other than factors that affect job satisfaction,

researchers have developed models, which they attributed to job satisfaction. Hackman

and Oldham (1976) developed the job characteristic model, which expanded Herzberg's

model for five job characteristics affecting job satisfaction. These job characteristics

included (a) skill variety, (b) task identity, (c) task significance, (d) autonomy, and (e)

feedback. During the same year, Locke (1976) introduced the range of affect theory,

aligning job satisfaction with an individual's perspectives of job desires and status. This

model implies that discrepancies exist between an individual's job desires and his or her

current job status (Wilczyska, Batorski, & Sellens, 2016). Similarly, the models of

Herzberg's, Hackman and Oldham's, and Locke's relate to motivating factors of job

satisfaction and dissatisfaction resulting from met or unmet needs in the work

environment. Prioritizing the identity of factors that lead to job satisfaction and

dissatisfaction may enhance the work environment.

Other researchers also developed theories related to job satisfaction. Adams' (1963) equity theory proposed that job satisfaction equated with an employee's perception of fair or unfair treatment. Similarly, Adam and Herzberg identified inadequate compensation, though not necessarily a motivator, as a factor of dissatisfaction. Dugguh and Ayaga (2014) asserted low compensation prompted adverse behavior resulting in low performance. Vroom's (1964) expectancy theory posited that employees expect to receive rewards based on strong work ethics that lead to high-level performance and outcomes. Ahmad, Rizvi, and Bokhari (2017) asserted the type of reward determines the level of motivation. Therefore, employees' behavior may have a direct effect on outcomes (Shin, Koh, & Shim, 2015). Unlike Vroom's expectancy theory, Adam's equity theory balances employees' views of outcomes and efforts to offset potential inequities in comparison to others (Aidla, 2013). Recognizing the importance of the reward and compensation may affect job, which may improve performance and outcomes.

Job satisfaction includes various types of job-related aspects. Spector (1997) described job satisfaction as the level of contentment or discontent with an employee's job. With the obligation to provide employees with a positive working environment, which may affect the level of satisfaction or dissatisfaction, identifying the factors has become a priority (Tejpal, 2015). Spector (1994) developed the Job Satisfaction Survey. These constructs are (a) pay, (b) promotion, (c) supervision, (d) fringe benefits, (e) contingent rewards, (f) operating procedures, (g) coworkers, (h) nature of the work, and

(i) communication. Although these constructs feature factors, which could improve employees' level of job satisfaction, these factors could also act as drivers or barriers.

The theory of reasoned action correlates with job satisfaction. Job satisfaction refers to an individual's positive emotional state achieved from recognition or job fulfillment (Locke, 1976). Based on the concepts of the theory of reasoned action, attitudes derived from individuals' beliefs can predict behavioral intentions (see Ajzen & Fishbein, 1980), and may predict nurse turnover intention from acquired levels of job satisfaction. Examining the concepts of work engagement, job satisfaction and the influence on nurse turnover intention can help hospital managers recognize the importance of strengthening relationships with nurses to create a stabilized workforce and a healthy work environment to enhance quality patient care and job satisfaction.

Pay, benefits, and nurses. It is necessary to examine nurses' perception of job satisfaction relating to pay and benefits' disbursements. Eberth, Elliott, and Skåtun (2016) described pay as wages calculated from employees' work hours included benefits. McMenamin (2014) reported that employers' earmark two-thirds of a nurse's pay for work tasks and allocate the remaining one-third for fringe benefits. In Canada, nurses have an option of higher wages or enhanced benefits (see Malak, 2017). Zahaj, Saliaj, Metani, Nika, and Alushi (2016) conducted a quantitative, cross-sectional study, which involved 50 nurses from Albania, to investigate the relationship between contributing factors and job satisfaction. The researchers found a significant and negative relationship existed between low salary and job satisfaction. Gabrani et al. (2016) conducted a quantitative study, which consisted of 246 nurses in public hospitals of Albania, to

examine the relationship between different aspects of job aspects, organizational commitment, and job satisfaction. Gabrani et al. found pay, nature of work, and their relationship with coworkers and supervisor positively influenced commitment and transcend into job satisfaction. Economic and noneconomic exchange of benefits for work abilities evolved from the social exchange theory (Wittmer, Shepard, & Martin, 2015). Working in hospitals expose nurses to challenging physical and psychological work demands (Han, Trinkoff, & Geiger-Brown, 2014). With these work demands and conditions, nurses want higher pay (Eberth et al., 2016). However, because of the reductions in payments from the Federal government, inflation, and other financial pressures, a projection existed that nurses' salaries will continue to decline (McMenamin, 2014). Eberth et al. noted that some employers have determined that low pay does not interfere with recruitment prospects. Nonetheless, satisfaction or dissatisfaction with pay could affect behavior and work outcomes (Mohamed, Mohamad, & Awad, 2017), such as productivity and turnover levels (Maqbali, 2015). With the projected financial and organizational challenges, it may help hospital managers to understand the importance of pay and benefits to nurses.

Demographic variables affect the outlook of pay, benefits, and nurses' job satisfaction. To understand further the factors of nurses' job satisfaction, Maqbali conducted a literature review acquired from numerous databases involving various studies in diverse countries to investigate nurses' job satisfaction. Maqbali found that demographic variables and organizational factors had a direct positive or negative relationship with job satisfaction, which ultimately affects work outcomes. For example,

Lober and Savič (2012) conducted a quantitative study, which involved 413 nurses and 96 nursing leaders from hospitals located in Slovenia, to investigate the relationship between factors and their influence on job satisfaction. The researchers found that higher education levels had a moderate, positive correlation with job satisfaction. Conversely, age and tenure had a negative correlation with job satisfaction.

Nonetheless, both nurses and nurse leaders rated pay level as the item providing the lowest item of job satisfaction. Semachew, Belachew, Tesfaye, and Adinew's (2017) conducted a quantitative study, which involved 316 hospital nurses located in Ethiopia, to examine factors that relate to job satisfaction. Like Lober and Savič, Semachew et al. found pay rated among the top factors for dissatisfaction. In contrast to Lober and Savič's findings, Semachew et al. reported that more highly educated nurses were more dissatisfied than nurses with less education. Semachew et al. suggested the probable reason for dissatisfaction related to better-educated nurses with higher expectations levels. Although the disbursement of pay is important, demographic variables contribute a different influence on nurses' job satisfaction.

Promotional opportunities and nurses. Some nurses consider the availability of promotional opportunities as a factor in job satisfaction. Asegid, Belachew, & Yimam (2014) conducted a cross-sectional study combining quantitative and qualitative methods, which consisted of 278 nurses in Southern Ethiopia, to examine the relationship between factors influencing job satisfaction and turnover intention among nurses. The research findings of Asegid et al.'s study revealed that reduced promotional opportunities negatively correlated with nurses' job satisfaction, which led to turnover intention. Al-

Dossary, Vail, and Macfarlane (2012) conducted a quantitative, cross-sectional study, which consisted of 189 nurses, employed at a teaching hospital in Saudi Arabia, to examine the relationship between contributing factors and nurses' level of job satisfaction. In contrast to Asegid et al.'s results, Al-Dossary et al. noted that promotional opportunities, operating conditions, and benefits did not reveal a significant relationship but a moderate one. Factors such as pay, supervision, contingent rewards, coworkers, nature of work, and communication demonstrated a significant correlation with job satisfaction. Nonetheless, Campione (2015) asserted that pay or promotional opportunities might not retain the younger generation. To attain job satisfaction, hospital managers may benefit from recognizing the correlation between different competing factors.

Some researchers have recognized that other countries have unique aspects that affect job satisfaction. Zahaj et al. (2016) conducted a quantitative and cross-sectional study, which consisted of 50 public hospital nurses in Albania, to investigate factors affecting job satisfaction. With similarities to Al-Dossary et al.'s study, Zahaj et al. found that individual and professional promotion had a moderate, positive relationship with job satisfaction; yet, salary revealed the highest predictor of job satisfaction. Zahaj noted that in Albania, nurses do not have the freedom to select their profession, which may explain the significance of pay compared with promotional opportunities. Salem, Baddar, and Al-Mugatti (2016) conducted a quantitative study, which consisted of 591 nurses in Saudi Arabia, to examine the relationship between job satisfaction and organizational commitment. These findings also revealed that opportunities for job advancement had a

moderate, positive relationship with job satisfaction compared with pay, which had the highest significance for job satisfaction. Salem et al. recommended increases in promotions, rewards, and work conditions to enhance job satisfaction, which may improve nurses' loyalty to the organization. Minimal promotional opportunities have higher incidences of turnover intention (Deery & Jago, 2015; Wilson, 2015). With the dominance of female nurses, hospital managers may benefit from examining other methods to increase job satisfaction and retention for organizational survival.

Relationships with coworkers and supervisors among nurses. The relationships with coworkers and supervisors affect nurses' level of job satisfaction. Spector (1997) asserted that the level of job satisfaction determines employees' perception of their job. With the various economic challenges, hospitals are struggling with minimal resources, which affect nurses' staffing levels, potentially jeopardizing patient safety (Mensik & Nickitas, 2015). Nurses encounter physical and psychological demands (Mullen, 2015) while interacting with patients and families during illness and death occurrences (J. Sharma & Dhar, 2016). Strengthening relationships with supervisors and coworkers may reduce demands experienced by nurses.

Nurses have different relationships with supervisors and coworkers. Batura, Skordis-Worrall, Thapa, Basnyat, and Morrison (2016) asserted that relationships with coworkers and supervisors have a significant effect on job satisfaction. For example, Vera et al. (2016) conducted a quantitative study, which involved 313 hospital nurses located in Portugal, to examine the correlation between individual job autonomy, social support of supervisors and coworkers, and work engagement. Vera et al. found that

supervisors' support had a significant and positive effect on work engagement. Lu et al. (2016) asserted that work engagement influenced job satisfaction. However, coworkers' support did not reveal a positive relationship. Unlike the findings of Vera et al., de Oliveira, Griep, Portela, and Rotenberg (2017) conducted a quantitative, cross-sectional study, which consisted of 3,229 hospital nurses in Brazil, to examine the relationship between contributing factors and the intention to leave. de Oliveira et al. found that the majority of nurses encountered low supervisor support and higher levels of support with coworkers, which could affect their turnover intention. In a similar study, Aly and El-Shanawany (2016) conducted a quantitative and correlational study, which consisted of 236 nurses at Alexandria University Hospitals, located in Egypt, to investigate the relationship between nurses' organizational trust on nurses' attitudes toward change. Dislike Vera et al. and de Oliveira et al., Aly and El-Shanawany found that nurses revealed a high level of trust with both their coworkers and supervisors, of which they provided help during difficult situations. Trust also established positive attitudes toward change. In contrast, a low trust would interfere with building relationships and create adverse attitudes toward change triggering dissatisfaction. Kwantes and Prasad (2014) conducted a quantitative study, which included 22 nurses and 21 physicians in a hospital in India, to examine workplace commitment between the organization and peers. The researchers found that nurses had a high-level commitment to their supervisors; yet, their relationship with their coworkers was not optimal. However, the physicians' level of commitment had a different dimension because of their job responsibilities. These studies

show the significance of trust within an organizational hierarchy, in this case, the healthcare industry.

Nurses encounter conflicts with balancing work and family demands. Many nurses experience conflicts between work and family (Unruh, Raffenaud, Fottler, & Fragoso, 2016). Haeruddin and Natsir (2016) asserted that supervisors' and coworkers' flexibility could reduce work-family conflicts experienced by nurses. Koning (2014) conducted a literature review of 31 articles using the Cumulative Index to Nursing and Allied Health Literature, to examine the nurses' self-scheduling programs and the effect on nurses' job satisfaction. Koning found a positive relationship existed between flexible work schedules and job satisfaction. For example, Han et al. (2014) conducted a quantitative study, which consisted of data from 80 registered nurses acquired from the Nurses Sleep Study (Geiger-Brown et al., 2012). The researchers examined the relationship between work and nonwork factors that influence fatigue when working 12-hour shifts while attempting to balance work and home demands. Han et al. found working shifts and work demands had a significant and positive effect on fatigue. In contrast, a relationship did not exist between nonwork demands and fatigue. Both Koning and Han et al. related nurses' work schedules to positive or negative outcomes. Hurtado, Nelson, Hashimoto, and Sorensen (2015) conducted a quantitative and cross-sectional study, which included registered nurses, licensed practical nurses, patient-care associates, and unit managers totaling 1,595 participants in Boston. The researchers investigated the relationship between meal breaks, supervisor support, and psychological distress. Like Han et al. relating to work demands and outcomes, Hurtado et al. found a relationship

existed between the frequency of meal breaks and psychological distress. Each study revealed work-induced challenges experienced by nurses and the probability of experiencing fatigue.

Some researchers investigated the challenges experienced by nurse work demands. Koning found that self-scheduling programs provided nurses with the freedom to arrange their shift, to balance nonwork commitments, which increased morale and created a positive work environment, resulting in increased job satisfaction. Like Koning and Han et al. asserted that giving nurses the flexibility to arrange their schedule may reduce adverse work-related outcomes and increase job satisfaction. Han et al. concluded that a significant negative correlation between high levels of fatigue, low levels of supervisor or coworker support, and higher demands reduced job satisfaction. Hurtado et al. showed implementing higher frequency of meal breaks correlated with supervisor support and the nurses experienced lower psychological distress. Despite the findings, Koning, neither Han et al., nor Hurtado et al. discussed the best work environment for the implementation of flexible work-scheduling strategies. However, all studies supported the claim of Haeruddin and Natsir (2016) that flexibility may reduce work and family conflicts experienced by nurses. Providing flexible scheduling and breaks may help to reduce work and family conflicts and associated distress to improve nurses' work environment.

Contingent rewards among nurses. Contingent rewards fuel job satisfaction among nurses. Transactional leaders refer to contingent rewards as an incentive to influence employees' achievement of goals to benefit an organization or threaten

punishment, because of nonachievement (Dartey-Baah & Ampofo, 2016). In contrast, transformational leaders argue that contingent rewards refer to the distribution of rewards as a positive reinforcement to acknowledge employees for their performance (Hussain, Wan Ismail, Rashid, & Nisar, 2016). Al-Dossary et al. (2012) conducted a quantitative, cross-sectional study, which involved 189 nurses in Saudi Arabia, to examine the relationship between factors that influence job satisfaction. Al-Dossary et al. found that contingent rewards, pay, and fringe benefits had a significant, positive correlation with job satisfaction. Armstrong-Stassen, Freeman, Cameron, and Rajacich (2015) conducted a quantitative study, which consisted of 660 older nurses in Canada, in which they hypothesized the perceived availability of recognition and respect practices with procedural justice. Procedural justice refers to the implementation of fair practices in the organization (Rodwell & Gulyas, 2015). In contrast to Al-Dossary et al., Armstrong-Stassen et al.'s study found recognition, respect, and procedural justice revealed a significant, positive correlation with job satisfaction. The type of leadership style of managers and the age of nurses associate the type of contingent reward used to increase nurses' job satisfaction.

The concept of rewards and recognition has various effects and outcomes. Although many organizations implement formal reward programs, some employees value informal acknowledgment of appreciation (Benson, 2015). Offering rewards may improve dissatisfaction (Al-Dossary et al., 2012). Employees' age may affect job satisfaction (Guinot, Chiva, & Roca-Puig, 2014). Armstrong-Stassen et al. (2015) noted that the desire for recognition and respect practices influenced older nurses to remain

with the organization. Mohammad Mosadeghrad (2014) conducted a quantitative, correlational study, which consisted of 608 hospital employees, nurses, and physicians in Iran, to examine the relationship between occupational stress and employees' health and well-being. Mohammad Mosadeghrad found that the lack of reward and recognition represented one of the major sources of occupational stress resulting in turnover intention. The distribution of rewards and recognition may inspire or dampen employees' influence on job satisfaction.

Policies, procedures, and nurses. Development of policies and procedures to investigate the effect of nurse-staffing levels may improve nurses' job satisfaction. With escalating costs of healthcare in the United States, hospital managers are challenged to reduce nurse-staffing levels (Jernigan et al., 2016) because of the high cost of nurses' salaries (Hairr, Salisbury, Johannsson, & Redfern-Vance, 2014). Strategies to decrease nurse-staffing levels require healthcare managers to develop policies to reduce costs (Eberth et al., 2016). Conversely, healthcare leaders have an ethical obligation to prioritize the safety of patients' lives versus reducing staffing levels to meet budgetary constraints (Mensik & Nickitas, 2015). Hairr et al. conducted a quantitative, correlational study, which surveyed 70 nurses from social media platforms and databases employed at acute care facilities, to examine the relationship between nurse staffing, job satisfaction, and nurse retention. In a similar study, MacPhee, Dahinten, and Havaei (2017) conducted a quantitative, cross-sectional, and correlational study, which surveyed 427 acute care and licensed registered and practical nurses from British Columbia, Canada, to examine the relationships between workload factors and patient and nurse outcomes. The findings

of both studies revealed that nurse-staffing levels resulted in a weak positive correlation between job satisfaction and adverse patient outcomes, such as medication errors, falls, and urinary tract infections. Despite these results, adequate nurse-staffing levels may enhance the quality of patient care (Africa, 2017), safety, job satisfaction, and retention (Hairr et al., 2014), because staffing levels depend on the severity of patients' needs (Kumari & De Alwis, 2015). By hospital managers understanding the challenges of inadequate nurse-staffing levels, may help improve job satisfaction and counter adverse patient safety and outcomes.

Some researchers studied the importance of establishing policies related to patient safety and outcome help to create a patient safety culture. Top and Tekingündüz (2015) described a patient safety culture to encompass organizational values, beliefs, and norms. In healthcare, a patient safety culture involves the accountability of all levels of staff to promote prevention and reduction of unsafe events through consistent error reporting to improve patient safety (Alswat et al., 2017). Pattison and Kline (2015) stressed the importance of a trusting culture where managers' roles prioritize establishing error management rather than instilling fear for errors caused to improve patient safety. Top and Tekingündüz conducted a quantitative study, which consisted of 200 nurses, located in Turkey, to examine the relationship between nurses' perceptions and patient safety. Top and Tekingündüz concurred with Pattison and Kline to develop an error reporting system, which could prioritize the identification of errors through increased training and communication rather than punishment for errors initiated to improve the patient safety

culture. Establishing policies to develop a patient safety culture requires a team collaborative effort to work toward improving the quality of patient care.

Supervisors play a critical role in ensuring compliance with patient safety. Toode et al. (2015) conducted a quantitative and cross-sectional study, which consisted of 201 registered nurses from the Estonian Nurses' Association website, to examine the relationships between perceptions of control and work satisfaction and the effect on nurses' motivation and patient safety. Toode et al. found a positive correlation between perceptions of overall patient safety and workplace characteristics. Smothers, Doleh, Celuch, Peluchette, and Valadares (2016) conducted a quantitative study, which consisted of 259 nurses in the Midwestern United States, to examine the correlation between the supervisors' communication and integrity to enhance employee empowerment through intellectual stimulation and the influence on patient safety. Toode et al. reported that nurses who exhibited higher levels of engagement, empowerment, and intrinsic motivation attain better patient safety than nurses who experienced lower levels. Similarly, Smothers et al.'s (2016) study revealed nurses who exhibited lower empowerment levels lacked the motivation to improve patient safety measures. In contrast, Smothers et al. identified nurses with high intellectual stimulation had a significant relationship between empowerment and patient safety than nurses with low intellectual stimulation. Conversely, in both studies, nurses identified managers' lack of support and integrity for ensuring patient safety related to effective communication, empowerment, and autonomy, which would increase nurses' confidence to report unsafe workplace conditions without fear (Smothers et al., 2016; Toode et al., 2015). Thus,

Smothers et al. emphasized the importance of establishing user-friendly policies and procedures to enhance employees' empowerment toward patient safety education and compliance. Nurses tolerate a significant amount of job stress in their attempts to assure the patient safety to prevent adverse outcomes.

Some researchers have investigated the effectiveness of policies and nurses' job stress. Rajan (2015) defined job stress as an individual's mental imbalance between psychological and physiological strain resulting from workplace challenges. Rajan conducted a quantitative study, which consisted of 360 hospital nurses located in India, to examine the factors of stress among nurses about organizational structure and policy, work shift, interpersonal relationships, and their influence on job performance. Rajan found that organizational structure and policy, work shift, and interpersonal relationship at the workplace had a moderate effect on work stress. Li et al. (2017) conducted a quantitative and cross-sectional study, which involved 852 nurses in China, to investigate the correlation between coping strategies, work stress, workload, the nursing profession, clinical duty, management and interpersonal relationships, and the influence on job performance. Like Rajan, Li et al. found that coping strategies related to the nursing profession and clinical duty, workload and time, and management. Also, interpersonal relationship issues had a moderate, direct negative effect on work stress and job performance. O'Keefe et al. (2014) asserted that the implementation of stress reduction policies might help prevent adverse consequences. For example, excessive workloads may negatively affect patient safety and job satisfaction, as well as cause burnout (MacPhee et al., 2017). Providing nurses with the ability to have flexibility with work

schedules may reduce stress related to balancing work-family obligations (Koning, 2014).

Because women dominate the nursing profession (Urban & Quinlan, 2014), and juggle

family responsibilities, Unruh et al. (2016) emphasized that the development of work-

family policies may help reduce stress encountered by nurses to improve job satisfaction.

Fang and Hung (2014) noted stress might also impair a nurse's health. The development

of policies provides hospital managers with procedures that may help to reduce job stress

encountered by nurses to improve job satisfaction.

Nature of the Work and Nurses

Nurses execute various job tasks, and job demands to deliver quality patient care.

Rajan described hospital nurses' job tasks to include various responsibilities of patient

care from admission to discharge, patient safety, support to patients' family, and assist

physicians. Hu, Schaufeli, and Taris (2016) described job demands as the competing

physical, social, or organizational demands that result in adverse employee outcomes.

Nurses' responsibilities require nurses to work shifts and long hours, which often conflict

with acquiring sufficient sleep and disrupt family obligations (Han et al., 2014).

Examining the factors that control the balance of job tasks and job demands may help to

improve job satisfaction.

Nursing requires different work shifts to provide continuous care. In the United

States, many nurses work 12-hour shifts, which may cause fatigue (Martin, 2015).

Sadeghniiat-Haghighi and Yazdi (2015) described fatigue as a mental or physical strain

resulting from being sleep-deprived, stressed, or depressed, which may interfere with task

completion. Han et al. (2014) conducted a quantitative study, which incorporated data

acquired from the Nurses Sleep Study (Geiger-Brown et al., 2012), which consisted of 80

registered nurses, to examine the relationship between sleep, sleepiness, fatigue, and

neurocognitive performance while working 12-hour shifts. Han et al. discovered a

positive relationship with fatigue from schedule rotations and job demands and found that

reduced work hours, social support had a negative effect on fatigue. Regarding nurses

working 12-hour shifts, Han et al. could not determine the influence on nurses. Unruh

and Zhang (2014) conducted a quantitative study, which involved 414 newly licensed

registered nurses in Florida, to examine the effect of the hospital work environment on

job satisfaction. Like Han et al., Unruh and Zhang asserted high job demands resulted in

adverse work outcomes. Similarly, Unruh and Zhang asserted high job demands resulted

in adverse work outcomes. In contrast, Unruh and Zhang reported a positive relationship

with newly licensed registered nurses working 12-hour shifts and extended hours with

higher levels of job satisfaction. Working 12-hour shifts and job demands have different

influences on job satisfaction with some nurses.

Communication and Nurses

The hospital environment relies on constant communication between patients and

nurses. The development of communication skills helps the dissemination of information

between individuals (Ibrahim, El-Khedr, & Nosek, 2013). Nurses serve a dominant role

in hospitals (Mullen, 2015) and in providing direct patient care and improving patient

safety (Top & Tekingündüz, 2015). Communication, between patients and nurses, might

help establish trust to build relationships (MacVane Phipps, 2015), whereas poor

communication diminishes trust (Aly & El-Shanawany, 2016). Hospitals require constant

communication between patients and nurses, as well as other hospital staff, to deliver quality of care.

The hospital environment encounters various channels of communication to deliver quality of care. Ibrahim et al. (2013) conducted a quantitative and correlational study, which included 87 staff nurses, who worked in the pediatric intensive care in Egypt, to examine the effectiveness of communication and the effect on job satisfaction. Pediatric intensive care nurses encompass a stressful environment requiring expertise in communicating with children of various ages, the severity of illnesses, and communication challenges. The findings revealed a statistically significant correlation between communications of supervisors, children, within the work climate, which negatively affected job satisfaction. In the same vein, Wagner, Bezuidenhout, and Roos (2015) conducted a quantitative study, which consisted of 265 professional nurses, nurse managers, and operational managers in South Africa, to investigate communication satisfaction. In contrast to the findings of Ibrahim et al.'s study, Wagner et al. demonstrated that professional nurses showed communication satisfaction with nurse managers, whereas the nurse managers experienced poor communication satisfaction with professional nurses. Collectively, professional nurses, nurse managers, and operational managers all demonstrated some level of dissatisfaction with informal communication and activities. Although Ibrahim's et al.'s results differed from Wagner et al.'s findings, both studies concluded that effective communication might correlate with nurses achieving higher levels of job satisfaction. Various levels of staff have different expectations to achieve effective communication.

Communication can produce positive or negative consequences. In a literature review of 47 studies, from databases of PubMed, Web Science, and the Cochran Library, Vermeir et al. (2017) investigated communication satisfaction, job satisfaction, and the influence on turnover and burnout risk among nurses. Vermeir et al. found that a positive correlation existed between communication and job satisfaction. Conversely, Vermeir et al. found that insufficient communication may potentially spark job dissatisfaction resulting from burnout and turnover intention, which may provoke safety issues. Top and Tekingündüz (2015) conducted a quantitative study, which consisted of 200 nurses, from a public hospital in Turkey, to examine nurses' perceptions about patient safety in a hospital setting. Top and Tekingündüz found that increased communication openness enhanced patient safety, which may affect the financial stability of the organization. Vermeir et al. and Top and Tekingündüz shared similar recommendations to implement a collaborative, communicative effort involving all staff levels starting from the organizational leadership to ensure patient safety; however, they focused on different consequences. Negative consequences resulting from poor communication may affect nurses' job satisfaction and compromise quality of care.

Turnover Intention

Turnover intention creates instability for organizations. Mobley (1977, 1982) defined turnover intention as an employee's desire to quit an organization before terminating employment. Turnover intention may result from individual, organizational, or job characteristics, all of which can affect job satisfaction and influence voluntary turnover (P. Ghosh, Rai, Chauhan, Gupta, & Singh, 2015). Consequences of turnover

intention may result in the deviant behavior of employees, coworkers, and reductions in their performance and, the organization's performance (A. Sharma & Namburdiri, 2015). In contrast, establishing positive relationships at work may reduce turnover intention (Madden et al., 2015). A strategy to diminish employees' plan to quit may arise from rewarding employees for their value (Wei, 2015). Turnover intention is an essential consideration for professions such as nursing, in which anticipated shortages could present significant and devastating effects.

Some researchers have studied the importance of maintaining a stable workforce in healthcare organizations and the association with delivering quality of care. The healthcare industry contains numerous interrelated facets that lead employees to encounter adverse work-related outcomes (Tosun & Ulusoy, 2017). For example, registered nurses (RNs) play a dominant role in delivering patient care (Mullen, 2015). Because of this role, RNs face high work demands and often may need to fulfill multiple roles to provide quality of care, which may result in adverse work outcomes (J. Sharma & Dhar, 2016). The lack of resources offered to nurses, which affects their psychological and physical health, may entice nurses to leave the organization or the profession altogether (de Oliveira et al., 2017). These challenging factors of the nursing profession may contribute to the nursing shortage; thereby, adversely affect medical work environments (Humphries et al., 2014); Yang, Lv, Zhou, Liu, & Mi, 2017). Working environments are critical to nurses' level of job satisfaction, since experiencing job dissatisfaction may cause nurses to want to leave an organization or profession (Mazurenko, Gupte, & Shan, 2015). Therefore, to maintain a stable and qualified

workforce, hospital managers may benefit from identifying satisfying factors to reduce nurses' intention to leave.

Drivers and Barriers of Turnover Intention among Nurses

Job satisfaction. The literature highlights the importance of understanding the reasons for nurse turnover, one of which is job satisfaction. Scholars have identified a variety of factors that directly influence job satisfaction among nurses. Maqbali (2015) conducted a literature review of 1, 500 published research papers on nurses' job satisfaction to investigate the factors that influence job satisfaction. Maqbali found that nurse's level of job satisfaction or dissatisfaction influences nurse turnover, which causes a detriment to organizations' overall productivity and financial stability. Andresen, Hansen, and Grov (2016) conducted a quantitative study, which consisted of 498 nurses and 3,714 nonnurses acquired from the Life Course, Gender and Generation survey, (LOGG), a database survey company, to investigate satisfaction with jobs, life, and their influence on intention to change jobs. Like Maqbali, Andresen et al. found that nurses' intention to change jobs relied on their satisfaction levels. The researchers also found that demographic variables correlate with job satisfaction. Andresen et al. found that demographic variables such as age, gender, number of years on the job, working shift, or income level did not demonstrate a significant correlation with job satisfaction. However, Andresen et al. found that temporary positions, nagging coworkers, and low satisfaction might contribute to an individual's intention to change jobs. Earlier studies mentioned, as well as other literature, have attempted to scrutinize the nuances of job satisfaction, specifically in the nursing profession.

Within the field of nursing, several studies illustrate the relationships that existed between the causes of job satisfaction (or dissatisfaction), as well as which populations may be more affected by them. Mazurenko et al. (2015) conducted a quantitative and cross-sectional design study, which consisted of 8,796 registered nurses who were selected from the 2008 National Sample Survey of Registered Nurses (U.S. Department of Health and Human Services, 2008). Mazurenko et al. investigated the turnover intention of employment or intent to leave the nursing profession and found a significant and positive correlation between nurses' decision to leave the profession and work-related injuries or illnesses, education, marital status, and hospital locations. The researchers described the differences in job dissatisfaction as it relates to stress, salary, advancement opportunities, and leadership, as predictors to leave the organization rather than the nursing profession. de Oliviera et al. (2017) used a cross-sectional design, which included 3,229 registered nurses in Brazil, to investigate factors that cause intent to leave the profession. The researchers' findings revealed that stress, lack of supervisor support and recognition, gender, and high-demand tasks prompted nurses to leave the nursing profession. de Oliviera et al. and Mazurenko et al. found that younger nurses were more likely to leave the profession more rapidly than older nurses. Job satisfaction not only affects nurses' job satisfaction with their employment, but it also affects their intention to leave the profession.

Various factors influence job satisfaction, turnover intention, and turnover. Yang et al. (2017) conducted a cross-sectional study with quantitative and qualitative methods, which included 785 registered nurses in China, to investigate work pressure and factors

that contribute toward nurses' turnover intention. Yang et al. found that work stress predicted turnover intention, which may ultimately lead to turnover. Asegid et al. (2014) conducted a quantitative and cross-sectional design to identify factors that influenced job satisfaction, turnover intention, and turnover, which included 278 nurses in South Ethiopia. Asegid et al. offered the type of work environment and group cohesion as the most reliable predictor of turnover intention. Nonetheless, both Yang et al. and Asegid et al. found that age influenced job satisfaction and a negative relationship existed between job satisfaction on turnover intention and turnover. Identifying factors that affect job satisfaction such as job autonomy may reduce turnover intention and turnover.

Job autonomy. Nurses have revealed that job autonomy affects job satisfaction. Job autonomy refers to the authority or freedom that employees possess to perform job-related decision-making and tasks (Hackman & Oldham, 1976). Job autonomy develops from a supervisor's leadership style, which may extend employee involvement with work situations and ultimately enhance job satisfaction and retention (George, 2015). Maurits et al. (2015) conducted a quantitative cross-sectional study, which included 730 nurses in Holland, to examine the correlation between job and organizational characteristics, job satisfaction, occupational commitment and nurses' perceived ability to work until retirement. Maurits et al. found a positive relationship existed between their autonomy, supportive leadership, stress levels, and appreciation by senior management, which could elevate job satisfaction and their willingness to remain in employed in the organization. Aly and El-Shanawany (2016) asserted that the level of trust affects nurses' job autonomy. Some nurses attributed low organizational trust and lack of job autonomy to

job-related deviant behavior and increased their desire to leave the organization (Marasi et al., 2016). Nonetheless, in comparison to other challenges, in Rajan's (2015) quantitative study, nurses did not rate the lack of decision-making as a significant concern. Previous scholars have demonstrated the importance of perceived job autonomy and its effects on overall job satisfaction and retention with a position or organization.

Several quantitative researchers researched job autonomy's effects on work-related outcomes. Vera et al. (2016) conducted a quantitative convenience sample consisting of 313 nurses in Portuguese to examine the relationship between job autonomy, social support, and work engagement. Vera et al. found that job autonomy positively affected supervisor support, and work engagement. Wilson (2015) conducted a quantitative correlational study, which involved 56 allied healthcare employees in Australia, to examine the correlation between job satisfaction and intention to leave. In both Vera et al.'s and Wilson's studies, their findings consistently revealed a significant and positive relationship with job autonomy. In contrast to Vera et al., Wilson found that the lack of job autonomy might trigger employees' plan to leave. Selander and Ruuskanen (2016) suggested that a positive work environment might prove more valuable in reducing turnover intention than providing an excessive range of job autonomy. Researchers have revealed job autonomy's influence on positive or negative work-related outcomes that could link to organizational commitment.

Organizational commitment. Organizations need organizational commitment from their employees. Organizational commitment refers to employees' work allegiance, psychological attachment, or a feeling of connection to an organization (Tarigan &

Ariani, 2015). The concept of organizational commitment, developed by Meyer and Allen (1991) encompasses affective commitment, normative, and continuance commitment, which could affect an employee's behavior with an organization. Affective commitment refers to an employee's loyal allegiance to remain with an organization, whereas continuance and normative commitment reflect employees' misrepresentation of loyalty because insecurity to leave or because of an assumed responsibility (Nazir, Shafi, Qun, Nazir, & Tran, 2016; Tosun & Ulusoy, 2017). The various concepts of organizational commitment have different effects on employees' level of commitment.

Demographic variables and other factors affect nurses' organizational commitment. A shortage of nurses weakens organizational commitment, which is an essential component to improve hospital efficiency and attain organizational goals (Chen et al., 2015). Simha, Huang, and Elloy (2015) asserted that organizational commitment might affect the shortage of nurses and intent to leave the organization. Simha et al. conducted a quantitative and cross-sectional study, which consisted of 169 nurses from Taiwan, to examine the relationship between demographic variables burnout, and burnout and organizational commitment. Burnout refers to a feeling of being overwhelmed resulting in emotional exhaustion (H.-F. Lee et al., 2015). Simha et al. found a positive relationship existed between demographic variables relating to age and marital status, which influenced higher incidences of burnout. Also, the findings revealed a positive relationship between continuance commitment and a negative relationship with affective commitment. Jones (2015) conducted a quantitative study, which involved 145 registered and licensed practical nurses from the United States, to investigate demographic variables

and the level of organizational commitment. Unlike Simha et al., Jones found that the

level of organizational commitment varied between nursing qualifications than age.

Ultimately, these outcomes could negatively affect employees' productivity. Identifying

factors that negatively influence organizational commitment could prove an invaluable

source for hospital managers.

Organizational commitment establishes a framework for organizations to build

positive work environments. Jernigan et al. (2016) conducted a quantitative study, which

consisted of 418 hospital nurses in North Carolina, to examine the relationship between

nurses' perceptions of their work environment and their levels of organizational

commitment. Jernigan et al. found a positive work environment had a significant effect

on nurses' organizational commitment. Armstrong-Stassen et al. (2015) conducted a

quantitative study, which included 660 hospital registered nurses in Canada, to examine

the relationship between the perceived availability of human resource practices to older

nurses and older nurses' intentions to stay with the organization. Armstrong-Stassen et al.

found a strong relationship between older nurses' perception of fair HR practices by

nurse managers and their intention to remain in the organization. Armstrong-Strassen et

al. attributed this reciprocal relationship to the social exchange theory; that is, when an

organization demonstrates a commitment to their employees, the employees will

reciprocate. Although Jernigan et al. investigated different variables and dimensions of an

organizational commitment than Armstrong-Stassen et al., both groups of researchers

found that nurses' behaviors and perceptions influenced their level of organizational

commitment. Specifically, Jernigan et al. found that a positive work environment

significantly influences nurses' organizational commitment, while Armstrong-Stassen et al. found that policies perceived to be fair to older nurses increased their commitment and of intention to stay with the organization. Tarigan and Ariani (2015) asserted that a higher level of commitment might result in reduced turnover intention. Achieving organizational commitment may help to mediate the challenges of staff shortages and turnover intention, which requires hospital managers to create work environments that foster fair treatment of employees and an overall positive atmosphere which to work.

Different factors can affect nurses' level of commitment to their organizations. Chen et al. (2015) conducted a quantitative and correlational study, which involved 386 hospital nurses in Taiwan, to examine the influence of perceived organizational justice and the effect it had on organizational trust, organizational identification, and on organizational commitment. Freitas da Costa Freire & Machado Azevedo (2015) conducted a quantitative study, which consisted of 189 public hospital nurses in Portugal, to examine the influence of empowerment on perceptions of trustworthiness and organizational commitment. Freitas da Costa Freire & Machado Azevedo found that nurses' empowerment had a significant relationship between affective commitment and perceived supervisors' trustworthiness. In Aly and El-Shanawany's (2016) quantitative study, which consisted of 236 nurses, they examined the relationship between organizational trust and nurses. They found that establishing organizational trust enhances relationships, especially in the healthcare environment. Unlike the study of Chen et al. (2015), researchers Freitas da Costa Freire & Machado Azevedo failed to establish the relationship between trust and commitment. Having a positive work

environment, organizational trust, and strong relationships with others, can help establish

a foundation on which to build organizational commitment among nurses; however,

analyzing additional demographic variables may offer different conclusions.

Psychological contract. An additional influential point to consider is a

psychological contract. A psychological contract refers to an employee's perception of

their reciprocal relationship (e.g., mutual understandings, expectations, or sense of

obligation) that an employee shares with his or her employer (Rousseau, 1989). Two

important related terms are a psychological breach and a psychological contract violation.

A psychological contract breach refers to an individual's perception of failure to fulfill a

psychological contract (Morrison & Robinson, 1997), and a psychological violation

relates specifically to the emotional distress associated with a breach of the psychological

contract (Trybou, De Pourcq, Paeshuyse, & Gemmel, 2014). Honoring or violating a

psychological contract bears positive or negative consequences.

Several researchers studied the relationship between psychological contract and

turnover intention. Christian and Ellis (2014) conducted two quantitative studies, which

included 44 nurses employed in a hospital system located in the Southwestern United

States, and 52 full-time working adults, recruited from an online research instrument, to

examine the relationship between moral disengagement and turnover intention. Christian

and Ellis found a significant and positive correlation between high turnover intention

when employees portrayed moral disengagement and deviant behavior, which destroyed

the psychological contract between employees and the organization. Trybou et al. (2014)

conducted a quantitative and cross-sectional design study, which included 109 nurses and

128 nurse assistants in Belgium, to investigate the relationship between psychological contract breach and psychological contract violation. Like Christian and Ellis, the findings of Trybou et al. demonstrated that destroying a psychological contract has a negative relationship with job satisfaction and affective organizational commitment, which triggers turnover intention. In another quantitative study, Rodwell, Ellershaw, and Flower (2015) conducted a quantitative research study, which consisted of 222 nurses and midwives in Australia, to examine the correlation between psychological contract and negative affectivity on job satisfaction, organizational identification, and psychological distress. Rodwell et al. found that psychological contract breach had a negative relationship with employee's job satisfaction, as well as the individual's organizational identification. Unlike obligations, fulfillment demonstrated an association with job satisfaction. Nonetheless, Trybou et al. determined that, although employees' perceptions of psychological contract breach may not significantly influence turnover intention, psychological contract breach affects the maintenance of a stable nursing workforce. Regarding turnover intention, psychological contract breach, and violations are all critical considerations for the future of the nursing profession.

Perceived organizational support and affective commitment. Feelings about an employee's organization and the support and commitment one perceives can both play a role in an employee's decision to remain or leave an organization. Perceived organizational support refers to an employees' perception of the support he or she receives from an organization, in exchange for the value he or she contributes to the organization **(**Wnuk, 2017). Affective commitment refers to an employee's feeling of

connection to the organization itself (Demirtas & Akdogan, 2015). Dasgupta (2015) conducted a quantitative study, which involved 175 nurses in India, to examine the relationship between perceived organizational support, affective commitment, core self-evaluations, nursing role stress, and turnover intention. Dasgupta found nurses' role stress reduced perceived organizational support, and core self-evaluations had a significant adverse effect on nurse turnover intention. Robson and Robson (2016) conducted a quantitative study, which consisted of 433 nurses in the United Kingdom, to examine the correlations between perceived organizational support, affective commitment, leader-member exchange, and turnover intention. Robson and Robson, like Dasgupta, found that perceived organizational support has a significant and negative relationship with affective commitment and turnover intention. Zin (2017) asserted that employees, who feel valued and rewarded by their organization, might increase their intentions to remain with the organization. These studies demonstrate that perceptions of organizational support derive from employees' interpretations of management's supportive behaviors, which may ultimately motivate or demotivate their work outcomes.

The work environment. Work environment has shown to influence nurses' level of work contribution and behaviors. Work environment refers to the physical, psychological, and social elements of a work atmosphere can affect the productivity and the performance of employees from a positive or negative perspective (Agbozo et al., 2017). The work environment has shown to influence nurses' work behaviors (Hurtado et al., 2015; Jernigan et al., 2016; Karimi, Leggat, Donohue, Bartram, & Oakman, 2017). For example, Needleman (2015), conducted research and asserted, that nurse-staffing

levels and demands could create positive or negative work environments. Jernigan et al.

conducted a quantitative study, which incorporated 418 registered nurses, in the United

States, to examine the relationship between work environment and organizational

commitment. Jernigan et al. found a positive work environment correlates positively with

job satisfaction and organizational commitment. The work environment determines the

level of organizational commitment and the organizational citizen behavior that an

employee is willing to contribute.

The development of organizational commitment and citizenship behavior evolves

from the work environment. Organizational citizen behavior refers to employees'

heightened contribution of their job tasks, which may contribute toward achieving

organizational goals (Abed & Elewa, 2016). Cetin, Gürbüz, and Sert (2015) conducted a

literature review, which consisted of 27,640 samples from 16 international databases to

investigate the relationship between organizational commitment and organizational

citizenship behaviors (OCBs) from the public and private organizations. Clark, Zickar,

and Jex (2014) conducted a quantitative study, which included 94 nurses, from two

hospitals, in the midWestern United States, to examine the relationship between safety

climate and employees' OCBs. Abed and Elewa conducted a quantitative and

correlational study, which consisted of 257 nurses in Egypt, to examine the relationship

between organizational support, work engagement, and organizational citizenship

behavior. Cetin et al. found a strong and positive relationship between organizational

commitment and OCB with private organizations compared to public organizations.

Similarly, Abed and Elewa's finding revealed that hospitals had a stronger relationship

with organizational support, organizational citizenship behavior, work engagement thank

compared to public organizations because of the different type of organization. Like,

Cetin et al., Abed and Elewa, and Clark et al. found a positive relationship between

organizational citizenship behaviors (OCBs) and the nurses' perceptions of

managements' commitment may provide a safe work environment. Unlike Cetin et al.

and Clark et al., Abed and Elewa found that demographic variables relating to age and

marital status revealed no significance. However, education and the working unit did

reveal a positive relationship with organizational citizenship behavior. Finally, the

findings revealed a significant and positive correlation existed between organizational

support, work engagement, and organizational citizenship behavior. Nurses who engage

in organizational citizenship behaviors may improve patient outcomes, as well as enhance

the experiences of both the patient and employees. In contrast, nurses may disengage in

OCBs when they experienced an unsafe work environment. However, Ying-Wen (2012)

recognized that employees experiencing burnout could hurt OCBs; so developing

supportive work environments is crucial in influencing OCBs reducing counterproductive

behaviors. Ultimately, the quality of the work environment can directly influence

turnover intention (Markey et al., 2015). Improving the work environment may help

reduce negative work-related outcomes and intention to leave.

Workload, Stress, and Burnout

　　　　Workload. Research findings have consistently demonstrated the consequences

of increased workloads and working excessive hours among nurses. The assignment of

low and high–level workloads might adversely affect employees' job performance

(Bruggen, 2015). Kumari and De Alwis (2015) conducted a quantitative study, which consisted of 93 nurses in Sri Lanka, to examine the relationship between nursing shortage and nurses' workload. Kumari and De Alwis found a negative correlation between nurse's workload and quality of patient care. The researchers explained the quality of patient care could suffer, because of a shortage of nurses, which could produce high nurse workloads. However, the research findings did not find a significant correlation between stress, job satisfaction, and workload. MacPhee et al. (2017) conducted a quantitative study, which consisted of 472 nurses in Canada, to examine the relationship between workload related factors and patient and nurse outcomes. Like Kumari and De Alwis, MacPhee et al. found that high workloads negatively affected patient and nurse outcomes. For example, nurses with high–level workloads may result in creating more errors and poor patient experiences (Kumari & De Alwis, 2015). MacPhee et al.'s study revealed that high workloads and staff interruptions caused an increase in patient falls and urinary tract infections. In contrast, Bruggen (2015) suggested that employees who produce only low-level workloads perform minimally. As the complexity of the nursing profession continues to progress, the ripple effect of potential nursing shortages will continue to increase nurses' workloads (Phua & Hue, 2015). Therefore, it is critical that researchers and practitioners work together to find a way of determining and soliciting appropriate workload levels.

The importance of workload relates directly to anticipating nursing shortages as well as turnover intention and turnover. Healthcare managers in the United States and Europe, for example, may request or require nurses to work overtime as a short-term

solution to counter staff shortages, which may adversely affect nurses' health and patient outcomes (Wheatley, 2017). For instance, Fang and Hung (2014) conducted a quantitative, cross-sectional study, which consisted of 233 married female nurses in Taiwan, to examine the relationship between employment and family responsibilities and nurses' health. Fang and Hung found married female nurses who exceeded 48 working hours or those who worked overtime had a significantly negative correlation with experiencing higher levels of stress when compared to nurses who worked fewer hours. Kumari and De Alwis, unlike Fang and Hung, did not find a significant correlation between the levels of job satisfaction and stress relating to nurses' workload. Other researchers have found that increased workloads and inadequate staffing levels may affect the quality of patient care (Chau et al., 2015; Kumari & De Alwis, 2015; Malloch, 2015). Also, increased stress levels of nurses (Fang & Hung, 2014) and nurses' job disssatisfaction (Unruh & Zhang, 2014). Africa (2017) asserted that appropriate staffing might improve nurse retention, the work environment, patient safety, as well as organizational efficiency. With the projected staff shortages, hospital managers need to develop a strategic approach to balance workload and work hours to reduce stress, which may improve nurses' job performance.

Nurse-staffing levels shape stress levels. Amarnath and Himabindu (2016) described stress as pressure from work conditions that adversely affect employees' health and their behaviors, which can potentially cause problems within the organizations and in the nurses' homes. Sohail and Rehman (2015) described job stress as a trigger to the imbalance of skills and demands to fulfill job-related tasks. Rajan (2015) conducted a

quantitative study, which incorporated 360 hospital nurses in India, to examine the relationship between stress and job performance. Salilih and Abajobir (2014) conducted a quantitative study, which consisted of 343 public hospital nurses, in Ethiopia, to measure work-related stress among nurses. Salilih and Abajobir found a significant adverse relationship between work-related stress and gender, marital status, illness status, type of nursing unit and shift and nurses. Similarly, the findings of both Rajan and Salilih and Abajobir revealed that heavy workloads potentially interfere with developing interpersonal relationships and support, which ranked the highest causes of stress levels. Also to the researchers' similar findings, Rajan did not associate any relationship between demographic variables and stress encountered. However, Salilih and Abajobir reported that females encountered more stress than males and widowed and divorced nurses encountered more stress than married nurses (Salilih & Abajobir, 2014). Also, stress may result in reduced productivity (O'Keefe et al., 2014) and satisfaction (Tiwari & Singh, 2014). Depending on the level of stress, stress may increase motivation (Tiwari & Singh, 2014). Ensuring adequate nurse-staffing levels may mediate adverse work-related and patient outcomes.

Coping strategies affect stress levels and as well as behaviors. Kumari and De Alwis (2015) described coping strategies as a positive method for nurses to use to reduce challenges. Li et al. (2017) conducted a quantitative and cross-sectional study, which involved 852 hospital nurses in China, to examine the relationship between coping strategies and the effects of work stress and job performance. The researchers found an adverse correlation between work-related stress and job performance and those positive

coping strategies may assist in reducing work-related stress. Further, the researchers'

findings revealed that when nurses experienced higher levels of work-related stress, they

used negative coping strategies. Newton, Teo, Pick, Ho, and Thomas (2016) conducted a

quantitative study, which consisted of 306 nurses in Australia, to examine the relationship

between emotional intelligence, job stress, and employee adjustment. Like Li et al.,

Newton et al. found that a variable measure of emotional intelligence had a positive

effect in reducing work-related stressors. The research demonstrates the importance of

effective coping strategies for nurses who experience work-related stress.

In a similar vein, researchers link work environment and stress with negative

work-related outcomes. Koçoğlu conducted a quantitative survey, which consisted of 199

Turkish nurses to investigate the effects of job stress, cynicism, and work alienation.

Cynicism refers to an adverse feeling about a person's job, whereas work alienation

refers to a withdrawal behavior that reduces all work-related outcomes (Koçoğlu, 2014).

The findings revealed that no relationship existed between demographic characteristics

and work-related stress. Koçoğlu asserted that a strong positive correlation existed

between job stress, cynicism, and work alienation. Similarly, Nowrouzi et al. (2015)

conducted a literature review to assess the work environment related to nurses'

occupational stress. The researchers found that occupational stress and burnout

compromised the health and the retention of nurses. Bussing, Falkenberg, Schoppe,

Daniela, and Poier (2017) conducted a quantitative study, which consisted of 913 nurses

and 470 physicians in Germany to examine the correlation between perceived work

stress, burnout, and the influence of "Cool Down" strategies. Bussing et al. described

Cool Down as methods to reduce perceived work-related stressors. Bussing et al. found a significant and positive relationship between emotional exhaustion with nurses and depersonalization with physicians. The researchers also found that these outcomes affected patient care. Unlike Koçoğlu, Bussing et al. revealed differences in females and males related to work-related stressors and no difference with Cool Down strategies. Establishing positive work environments may prevent or reduce stress, which could lead to burnout, experienced by nurses.

  Burnout. Nurse burnout evolves from various factors that could affect turnover. Schaufeli, Maslach, and Marek (2017) defined burnout as emotional exhaustion, which impairs an employee's physical and emotional state, which results in detachment from work tasks and the environment. S. Kim, Um, Kim, and Kim (2016) explained that burnout tends to reveal an undesirable work environment, which could cause harm to employees. For example, Mazurenko et al. (2015) conducted a quantitative study, which involved 8,796 registered nurses acquired from the U.S. 2008 National Sample Survey, to examine factors, which influence organizational and nurse turnover (U.S. Department of Health and Human Services, 2008). Mazurenko et al. found a positive relationship existed between nurses' illnesses and work-related injuries and leaving the nursing profession, whereas nurses who encounter high stress and poor organizational leadership resulted in nurse turnover with the organization. In a similar study, Charoensukmongkol, Moqbel, and Gutierrez-Wirsching (2016) conducted a quantitative study, which consisted of 174 faculty and staff employees from two universities in South Texas, to examine the relationship between coworker and supervisor support, burnout, and the influence on job

satisfaction. Charoensukmongkol et al. found that supervisor and coworker support could mediate job burnout and increase job satisfaction, while a lack of support may result in detachment. These studies validate the importance of hospital managers to recognize burnout in registered nurses.

Many factors are known to affect burnout in nurses. Snavely (2016) suggested that nurses encounter consequences due to an imbalance of supply and demand, which may result in burnout and cause nurses to consider resigning. For example, H. Lee et al. (2015) conducted a quantitative study, which involved 1,846 nurses in Taiwan, acquired from a NURSE–Outcomes study, to examine the relationship between burnout among nurses. H.-F. Lee et al.'s findings revealed younger nurses experienced higher levels of burnout compared to older nurses. Simha et al. conducted a quantitative study, which consisted of 169 nurses in Taiwan, to examine the relationship between demographic variables, burnout, and organizational commitment. Conversely, Simha et al. found that older nurses experienced higher variances of burnout compared to younger nurses. Interestingly, both Simha et al. and H. Lee et al. concluded that marital status had a significant effect on burnout among nurses. Both H. Lee and Simha et al. asserted that burnout might predict leaving the organization and findings revealed a relationship existed between burnout and demographic characteristics. Simha et al. further identified a positive relationship existed between burnout and continuance commitment, a negative relationship existed between emotional exhaustion and affective commitment, and depersonalization had a positive relationship with affective commitment, which

combined represented burnout. These studies show the importance of addressing the needs of the older nurses, which are vital to the organization.

Nurses face challenges to counter demands at work in attempts to balance family-work and work-family conflict. For instance, Charkhabi, Sartori, and Ceschi (2016) conducted a quantitative and cross-sectional study, which consisted of 311 hospital nurses in Iran, to examine the interrelationships between work and family and family and work conflicts and the types of conflicts, including time, strain, and behavior. Charkhabi et al. found that work-family demands have a more significant correlation than family-work conflicts. Charkhabi et al. also noted that strain-related conflicts related to mental and physical health were the most harmful. Nithya (2016) conducted a quantitative, correlational study, which involved 200 female nurses, in India, to examine the correlation between work-family conflict and family-work conflict. Although Charkhabi et al. and Nithya studied different genders in different countries; both reported that women likely face higher work-related conflicts than men because of their responsibilities at home, and both studies attributed work-family conflicts to competing work resources and demands. With these results in mind, it is important that hospital managers consider the stress that women not only face in the hospital but the stress they face at home.

Leadership style. The type of leadership style may have a different effect on turnover. Leadership, which refers to a person's influence to entice his or her followers to achieve broader goals (Baban, 2015), has a profound influence on job satisfaction and turnover (Roter, 2016). Leadership style refers to the type of leadership a person employs

to motivate followers to achieve an organizational goal (Hussain & Hassan, 2016). There are three styles of leadership, which are important to note in the context of this study. First, transformational leadership refers to leaders who gain employees' cooperation because of their caring nature, trust, and inspiration they instill in employees, which may result in achieving goals beyond expectation (Burns, 1978). Second, transactional leadership refers to leaders who influence employee compliance with rewards and punishment (Burns, 1978). Third, laissez-faire leadership style project an example where the leader remains detached from handling responsibilities (Yahaya & Ebrahim, 2016). Although other leadership styles exist, these three leadership styles are the only ones pertinent to this study.

With the various challenges of nursing shortages and high costs, healthcare requires a specific type of leadership style. Jordan, Werner, and Venter (2015) recognized transformational leadership as an effective leadership style to stimulate motivation to achieve organizational goals while balancing the challenges of providing quality care with limited resources. In contrast, Brandt, Laitinen, and Laitinen (2016) found that transformational leadership style has a weak relationship in achieving profitability and financial performance. Negussie and Demissie (2013) conducted a quantitative and correlational study, which consisted of 175 nurses in Ethiopia, to examine transformational and transactional leadership styles of nurse managers and the influence on their job satisfaction. Although Bass (1998) asserted that leaders might incorporate both transformational and transactional leadership styles, Negussie and Demissie's research findings revealed that nurses preferred a transformational leadership style

compared to transactional leadership. Nevertheless, Hill (2017) asserted that effective clinical leadership involves a combination of leadership styles. The findings of the research study revealed a significant and positive relationship existed between transformational leadership and job satisfaction. Indeed, transformational leadership may enhance positive outcomes beneficial to nurses and work environments.

Other scholars have specifically investigated leadership styles and the influence it has on job satisfaction and retention. Abualrub and Alghamdi (2012) conducted a quantitative study, which involved 308 nurses in Saudi Arabia, to investigate the relationships between leadership style, job satisfaction, and intention to remain in their jobs. The research findings of Negussie and Demissie (2013), Abualrub and Alghamdi, Dimaculangan and Aguiling (2012), and Chang, Wang, and Huang (2013) validated the relationship between transformational leadership and reduced turnover intention and turnover, which may help organizations maintain financial viability. As in most work environments, leaders and their styles of leadership, play a critical role in their employees' day-to-day satisfaction. Such considerations are specifically important in the field of nursing, which shows a strong need for retaining nurses in the profession.

Some scholars have investigated the importance of leadership style on job satisfaction among nurses. Momanyi and Kaimenyi (2015) conducted a mixed method study with 147 nurses in Kenya, to examine the relationship between influencing factors and nursing turnover. Momanyi and Kaimenyi found a significant relationship existed between the support and relationships between supervisors and coworkers and turnover. Also, pay, benefits, and advancement opportunities elevated dissatisfaction, which may

trigger turnover. For example, U.S. hospitals have noted that Magnet status hospitals show success in reducing turnover and nursing shortages (Momanyi & Kaimenyi, 2015) with transformational leadership style (Friese, Xia, Ghaferi, Birkmeyer, & Banerjee, 2015). Also, Magnet hospitals strive to portray nursing excellence and improve patient care (Tai & Bame, 2017). At the time of data collection, no studies were found that could contradict these findings.

The hospital manager's leadership style can have a direct effect on the nurses' work contribution Alatawi (2017) asserted that the transformational style had a statistically significant and negative relationship with turnover intention. Conversely, dysfunctional leadership encompassed variations of abusive behavior exhibited by leaders, which could affect the physical and psychological well-being of nurses and directly influence adverse organizational outcomes with inflicting considerable financial costs (Roter, 2016). As nursing supervisors encounter escalating demands with limited resources, the type of leadership style exhibited may either stimulate or dampen nurses' contribution to achieving maximal organizational effectiveness and positive work outcomes.

Turnover intention imposes social and financial strains. Turnover intention also drives nurse turnover (Yang et al., 2017). P. Ghosh et al. (2015) reported that turnover translates into lost business relationships and prospective business opportunities. In anticipation of the financial consequences caused by turnover intention, organizational leaders should recruit and retain managers with leadership styles who develop high-quality relationships with employees to reduce turnover intention.

Supervisor support. Relationships between supervisors and employees also affect turnover intention. Jernigan et al. (2016) described supervisor support as the support channeled by supervisors to employees, which could improve employees' confidence and shape a positive work environment. Vera et al.'s (2016) research findings revealed supervisor support resulted in a significant and positive relationship with job autonomy and work engagement. Newman, Nielsen, Smyth, and Hooke's (2015) conducted a quantitative study, which involved 393 hospital nurses in China, to examine the relationship between workplace support and life satisfaction. The findings revealed that supervisor support might also enhance employees' life satisfaction beyond the workplace. In contrast, with a nonnursing population, Haar, de Fluiter, and Brougham (2016) conducted a quantitative study, which consisted of 432 employees, from various occupational backgrounds in New Zealand. Haar et al. examined the relationship between abusive supervision and employee turnover intention and found that abusive supervision had a significant and positive effect on turnover intention. These findings demonstrate the importance of supervisor support.

Nurses are primarily dependent on the support of their supervisor. In a study on supervisor support and nurses' intention to leave the profession, de Oliveira et al. (2017) conducted a quantitative study, which included 3,229 public hospital nurses in Rio De Janeiro, to investigate nurses' intention to leave the nursing profession. de Oliveira et al. found that poor supervisor support may cause nurses to leave the profession. Jernigan et al. (2016) conducted a quantitative study, which involved 418 hospital nurses, in the United States, to investigate nurses' perceptions of their work environment. Like the

findings of de Oliveira et al. (2017), Jernigan et al. found that poor supervisor support may lead to turnover, and the consequence of turnover depletes an organizations' financial performance because essential resources become redirected toward new recruitment and training (Dusek, Ruppel, Yurova, & Clarke, 2014). Developing positive relationships, between supervisors and subordinates, has an opportunity to establish trust, which may not only increase job satisfaction but can also improve productivity (Mushonga, 2016). Also, positive work relationships between employee and supervisors may influence reduced turnover intention (Madden et al., 2015). With the demands of nurses, it is important to understand the effects of leadership styles and supervisor support within the nursing profession.

Actual Turnover and the Financial Impact on Hospitals

The United States has a global reputation for incurring the highest healthcare costs; healthcare managers are challenged to reduce hospital costs by decreasing the nurse-patient ratio (Jernigan et al., 2016). Nursing shortages may spur high nursing turnover (Yang et al., 2017). Actual turnover occurs when a compensated employee terminates employment with an organization (Mobley, 1982). The financial impact of actual turnover includes training, recruiting, and replacement costs (Tziner, Ben-David, Oren, & Sharoni (2014). Also, Yousaf et al. (2015) indicated turnover negatively affects the morale of existing employees. Jones (2005) conducted a case study, which consisted of 96 registered nurses, who left the organization during the time of the study, to analyze the costs of nurse turnover. Jones found that the average turnover costs per nurse ranged from $62,100 to $67,100. High turnover may adversely affect productivity levels and

reduce employee morale, which may contribute to an organization's financial instability (Cloutier, Felusiak, Hill, & Pemberton-Jones, 2015). In contrast, Momanyi and Kaimenyi (2015) noted that the turnover of unproductive employees provides an opportunity for organizations to recruit a more productive employee that will improve the organization's productivity levels. Understanding the potential negative outcomes of increased turnover in the nursing profession is critical to addressing reportedly higher rates of turnover intention and predictions for future nursing shortages.

Transition

Section 1 established the foundation of the healthcare challenges faced by hospital managers toward improving quality of care to patients and their families. This background explained the origin of these challenges, which stimulate nurse turnover intention. The problem statement defined the general and specific problems to identify the impact.

The purpose statement identified quantitative correlation as the type of methodology and design selected to conduct the research. Further, the purpose statement included the target population, the geographical location, and the contribution toward social change. The target population and location for this study were comprised of registered nurses employed in hospitals located in New York. Based on the problem and purpose statements, the research question and hypotheses guided the study.

Other subsections included the nature of the study, the theoretical framework, operational definitions, assumptions, limitations, delimitations, the significance of the study, and a review of the literature. The nature of the study expanded the methodology,

and design selected and validated this choice by explaining why other options did not

meet with approval. The theory of reasoned action served as the theoretical framework

underpinning of the study, which establishes outcome predictions based on the

relationships found between variables and the acceptance or rejection of the null

hypothesis. In the healthcare environment, employees may use unfamiliar terminology.

To reduce confusion, a select group of operational definitions provided clarity for

potentially unfamiliar terms. When designing a research study, researchers encounter

assumptions, limitations, and delimitations. Assumptions presumed details as true

without proof. Limitations identified uncontrollable aspects, whereas delimitations

depicted areas of researchers' control within the study. The significance of the study

highlighted the importance of the operational management of hospitals and the

contributed value of a stable workforce to attain positive social change. The literature

review consisted of an evaluation of the authors' perspectives on various topics related to

work engagement, job satisfaction, and nurse turnover intention, through a critical lens.

Section 2 will focus on the technical components of this study. These

subcomponents will include the role of the researcher, participants, research method and

design, population and sampling, ethical research, instrumentation, data collection

technique, data analysis, and study validity. An explanation of the role of the researcher

will provide clarity concerning any relationships with participants or knowledge of them,

and the obligation to ensure objectivity. An expanded version of the research method and

research design selected explained the reason to validate selection. Population and

sampling will further describe the sufficient number of participants needed for the study

and will introduce probabilistic sampling as the technique implemented to recruit

participants.

Section 2: The Project

In this study, I examined the relationship between work engagement, job satisfaction, and nurse turnover intention in hospitals. Specifically, I focused on the understanding of some factors that may affect the intentions of nurses to leave their current employment. I included full-time, registered nurses employed, for a minimum of 2 years, at their current hospital, in the geographical location of New York at the time of data collection. This section will consist of a description of my role as the researcher, as well as a description of the participants. I will explain the research method and the design, and the types of instruments selected for data collection. Following, I will identify the data analysis techniques used and the evaluation process to ensure the validity of the study.

Purpose Statement

The purpose of this quantitative correlational study was to determine whether work engagement and job satisfaction predicted nurse turnover intention in hospitals. The predictor variables include work engagement and job satisfaction. The independent variables include work engagement and job satisfaction. The dependent variable is nurse turnover intention. The target population consisted of a minimum of 146 registered nurses with a work history of at least 2 years, full-time work experience at their current hospital of employment in the state of New York. The implication for social change may contribute to hospital managers' understanding of some factors that may affect the intentions of nurses who leave their current employment, which could enhance the delivery of quality patient care and nurse job satisfaction. Identifying the underlying

factors of nurse turnover intention may help to reduce actual resignations and replacement of experienced nurses, which could improve healthcare organizations' financial performance because of the associated nurse replacement costs.

Role of the Researcher

As the researcher, my objective was to answer the research question: Do work engagement and job satisfaction predict nurse turnover intention at hospitals? Quantitative researchers collect and analyze data using quantitative methods and techniques (Walsh, 2015). I combined the UWES-9, JSS, and TIS instruments into one survey, as they represented standardized published instruments. Researchers have used these tools as reliable and valid instruments for data collection, which could improve the statistical quality of a research study (Field, 2013; Onen, 2016). In contrast, unreliability heightens the likelihood of measurement errors and inaccuracy of results (Riedl, Davis, & Heyner, 2014). Data collection process provided an opportunity to determine whether work engagement and job satisfaction predicted nurse turnover intention in hospitals. Examining this relationship helped to determine the strength between the predictor and dependent variables. Having a strong data collection positively affects the reliability and validity of the research findings (Field, 2013).

As the researcher, I possess a specific role with associated responsibilities. According to the Belmont Report (U.S. Department of Health and Human Services, 1979), researchers must abide by the ethical principles to protect participants in research studies, which includes (a) respect for persons, (b) beneficence, and (c) justice. In conjunction with the Belmont Report's principles, researchers must adhere to the

institutional review board (IRB) regulations to protect the privacy and confidentiality of participants (Udo-Akang, 2013). Employed for almost 30 years as a healthcare administrator, I have worked closely with registered nurses from various clinical departments and nursing units. Through my work experience, I have developed preconceived notions related to nurses' challenges in the workplace. Therefore, to prevent any potential influence or bias, I consciously restricted any discussions of my experiences, knowledge, or beliefs with prospective participants, which could sway their perspectives. The consequence of bias may jeopardize the accuracy of the research study's findings. Bias refers to challenges that weaken statistical validity in research studies (Stratton, 2015). Therefore, restricting interactions with participants and following the principles established in the Belmont Report could help researchers avoid or eliminate bias.

Participants

Selecting the appropriate participants has a strong effect on research findings. Participants' eligibility requirements for research study included (a) employment as a registered nurse, (b) full-time employment at a hospital in New York and (c) a minimum of 2 years work experience as a registered nurse at their current hospital of employment. Nurses represent a vital component of the healthcare delivery system (Kumari & De Alwis, 2015) to enhance the quality of care and contain healthcare costs (Gabrani et al., 2016). The selection of registered nurses, with their prominent role in the healthcare industry, represented an appropriate population for this research study.

To recruit prospective participants, I contacted chief nursing officers employed at hospitals located in New York for the purpose to recruit participants. In a study by Penoyer et al. (2014), the nursing research council approved an online study conducted by healthcare practitioners. In a study to examine employee turnover intention and job dissatisfaction, Christian and Ellis (2014) sought approval from the nursing directors and hospital administration before promoting the study. Similarly, before conducting a quantitative study, which consisted of nine nurses to examine fatigue and work shift levels, Martin (2015) sought permission from the chief nursing officer, chief executive officer, chief human resources officer, and various nursing directors. Acquiring permission from the hospital's senior leadership provided an approved status to begin the data collection process.

After identifying a hospital of interest, I forwarded the permission letter to recruit participants and the hospital organization letter of cooperation to the chief nursing officer. As a follow-up, I sent an e-mail to the chief nursing officer to inquire about her level of interest. Within the e-mail, I explained the purpose of the study and its relevance to the field of nursing, as well as addressed any questions or concerns. After acquiring permission from the chief nursing officer, I forwarded a sample survey packet to the chief nursing officer. The survey packet included (a) a letter of invitation, (b) informed consent form, (c) a combined survey [Work & Well-Being Survey (UWES-9), JSS, and TIS], (d) a demographic survey, and (e) a thank-you letter.

To solicit participation, I arranged to attend a nurses' meeting. On the day of the nurses' meeting, I conducted a presentation to the nurses and other staff members. I

distributed the survey packets to all prospective participants in attendance at the meeting. The survey packets included (a) a letter of invitation, (b) an informed consent letter, (c) combined surveys, which included the Work & Well-Being (UWES-9), JSS, and TIS, (d) a demographic survey, and (e) a thank-you letter. The letter of invitation introduced the research study and gave informed consent, which explained the research study's purpose, benefits, risks, and withdrawal procedures. To comply with Walden University IRB's guidelines, all participants must give informed consent to participate in a study. However, in this study, participants' completion and submission of the survey signified implied informed consent. Bolt, Pasman, Willems, and Onwuteaka-Philipsen (2016) conducted a quantitative study, which included 45 patients and 547 family members in the Netherlands, to examine the perception of care provided during the last phases of life. In another quantitative study, Sritharan, Mills, Levinson, and Gellie (2016) involved 107 physicians, to examine doctors' attitudes toward not for resuscitation (NFR) and barriers involved in the decision-making process. Bhattacharya (2015) conducted a mixed methods research, which included 74 candidates from various backgrounds, to examine the relationship between radio frequency identification (RFI) adoption issues and the progression of technology stages in the retail industry. In each study, the researchers administered an online survey and completion of the survey implied consent without requiring a written informed consent form. The more information researchers provide to explain the research study, the higher the potential of participation from prospective participants (Sobottka, 2016)

Often, quantitative researchers find it challenging to build relationships with surveys. Although, qualitative researchers have an advantage with building relationships through face-to-face interactions, such as focus groups and interviews (Mutale et al., 2013), Rowley (2014) reported that face-to-face distribution of surveys produced higher response rates. Building relationships with participants could begin with referring to participants as individuals, rather than subjects (Bouten-Pinto, 2016). To further establish a working relationship with participants, I distributed the survey packets in person. The content of the survey packets enclosed information to introduce me, as the researcher, the research study, its purpose, the benefits, and any associated risks. The informed consent included a statement to ensure confidentiality, withdrawal instructions and the security measures implemented in managing raw data. As the researcher, I made all attempts to ensure potential participants that they would not encounter coercion and emphasized that they could withdraw from the study at any time, without penalty. Also, I provided participants with both the Walden University representative's contact details and my information should any participant wish to discuss any questions or concerns. Explaining the research and the relevance of the study may help to entice potential participants to participate (Rowley, 2014). In Vera et al.'s (2016) study of 313 Portuguese nurses, before administering the survey, they explained the study to the ethical committee to receive approval and then to the supervisors to conduct the study. Providing introductory information may provide clarity to increase participation in a research study.

Research Method and Design

Researchers select the appropriate research method and design to establish a framework to conduct a research study. Various theories and assumptions guide researchers' decisions to select quantitative or qualitative research methods and designs (Haneef, 2013; Johnston, 2014). The purpose of this quantitative correlational study was to determine whether work engagement and job satisfaction predicted nurse turnover intention in hospitals. Examining the relationships between specific variables in a population aligns with the principles of quantitative research that assert correlation or causation for predictability (Zyphur & Pierides, 2017). The selection of an appropriate research method affects the findings of a study. Therefore, the following section will validate the use of a quantitative methodology, as opposed to choosing qualitative or mixed methods research.

Research Method

The goal of this quantitative research study was to determine if engagement and job satisfaction predict nurse turnover in hospitals. Quantitative methodologists use a statistical-based analysis model by testing the hypothesized relationships between predetermined variables that generalize and formulate predictions from a sample group of a large population (Haneef, 2013). Further, quantitative research incorporates an objective, positivist approach that includes statistical techniques, numerical data, and testing of hypotheses through deductive reasoning without manipulation (Haneef, 2013; Karlsen, 2014; Poortman & Schildkamp, 2012). As such, quantitative research requires a thorough examination of the relationships between multiple variables (Onen, 2016). Field

(2013) and Rowley (2014) asserted that large sample sizes lend themselves to generalizations about the population, and, thus, allows the researcher to examine the relationships between independent and dependent variables. Examining these relationships translates into a variety of fundamental trends such as frequencies and averages (Rowley, 2014). Rowley reported the distribution of surveys offers various options to researchers for data collection. A quantitative research approach provides more options to collect data and measure the variables of large populations to generalize an entire population (Apuke, 2017). Quantitative reseach is a useful method when conducting research to explain trends or features of a large population.

Qualitative researchers use different methods to collect data. They collect rich, in-depth data from lived experiences, which may result in bias and subjectivity and could affect reliability and validity (Boesch, Schwaninger, Weber, & Scholz, 2013; Lach, 2014). Qualitative methods yield unreliability because of their subjectivity (Andalib, 2016). Also, qualitative researchers may use smaller sizes and study the perceptions of a certain population, involving in-depth, narrative data, and smaller sample sizes (Sarma, 2015). Quantitative researchers, conversely, examine the relationships between variables (Martin & Bridgmon, 2012). Acquiring a large sample size provides greater accuracy for reliable results and reduces chances for error (Field, 2013). I examined the relationships between work engagement, job satisfaction, and nurse turnover by using statistical methods; qualitative methodology did not meet the research specifications for this study.

Mixed methods research provides both advantages and disadvantages to researchers. Molina-Azorin (2016) reported that mixed method research incorporates the

strengths of qualitative and quantitative research. However, not all studies call for the combination of two research methods (Heyvaert et al., 2013). Mixed methods research might require substantial funding and extensive time to conduct research (Heyvaert et al., 2013). In contrast, Gobo (2015) argued that combining qualitative and quantitative methods offers a cost-effective method for scholars to conduct research. However, Stockman (2015) asserted that students who consider mixed methods research may encounter numerous challenges, misconceptions, and demands toward developing further knowledge and acquiring a skillset for both research designs to produce a quality study. Although qualitative and mixed methods designs have advantages, a quantitative method was deemed the most appropriate method for this study because researchers using quantitative methods can generalize data to larger populations.

Research Design

For this study, I used a nonexperimental, quantitative research design. Martin and Bridgmon (2012) described three types of quantitative designs: (a) correlational designs, (b) experimental designs, and (c) quasi-experimental designs. Correlational research designs also involve collecting data without imposing control, conditions, manipulation, and use statistical techniques to analyze and interpret the results (Asamoah, 2014). Therefore, a correlational research design aligned with this quantitative study, which determined whether work engagement and job satisfaction predicted nurse turnover intention in hospitals. In an experimental design, as mentioned by Martin and Bridgmon (2012), researchers sought cause-and-effect relationships and used control groups through manipulation efforts on specific variables to determine the influence on similar measures

and outcomes. Field (2013) asserted that incorporating manipulative efforts provides an opportunity to examine variables from different perspectives. Correlational and experimental designs reflect two different strategies to achieve predictability between the relationships of variables. For this study, an experimental design would not meet the objectives of the research question because experimental design requires randomized treatment and control groups, as correlational design does not involve randomized control groups.

Quasi-experimental and correlational designs examine the relationships between variables from different approaches. Quantitative researchers use a quasi-experimental design to examine causal relationships by evaluating various treatments among variables (Zellmer-Bruhn, Caligiuri, & Thomas, 2016). Quantitative researchers use correlational designs to investigate the relationships between independent and dependent variables to determine the degree of correlation (Inabinett & Ballaro, 2014). Thus, Chetty, Friedman, and Rockoff (2014) noted that an advantage of quasi-experimental is the detection of bias between variables. For this study, Work & Well-Being Survey (UWES-9), JSS, and TIS are the instruments that I used to determine the relationship between work engagement, job satisfaction, and nurse turnover intention. After assessing the various research designs, correlational research design emerged as the most appropriate to determine the relationship between variables because a quasi-experimental because quasi-experimental designs typically include a pre and posttest (see Martin & Bridgmon, 2012). In this study, no intervention was conducted only examining the perceptions of registered nurses, at

one point in time, which explains why quasi-experimental design did not meet the criteria

for this study

Population and Sampling

Population

The population of this study consisted of registered nurses employed in a hospital

for a minimum of 2 years in their current hospital located in New York at the time of data

collection. The target population outlines essential information about the participants,

which could affect the accuracy of the study's findings (Lehmann & Bengart, 2016). To

investigate factors that could affect nurse turnover intention, I selected registered nurses

employed in hospitals in New York, where there exist approximately 180,000 nurses

(U.S. Department of Labor, Bureau of Labor Statistics, 2017a). New York represents one

of the top five states in the United States with the largest number of employed registered

nurses (U.S. Department of Labor, Bureau of Labor Statistics, 2017a). Selecting

registered nurses from New York provided an opportunity to recruit a small population

from a larger population for data collection in this study.

Sampling

In this study, I selected the participants using a probabilistic sampling technique.

The goal was to recruit registered nurse participants with characteristics which included

(a) employment as a registered nurse, (b) full-time employment at a hospital in New

York, and (c) a minimum of 2 years work experience as a registered nurse at their current

hospital of employment. Selecting the appropriate target population may help researchers

fulfill the goals to conduct a research study (Rea & Parker, 2014). Probabilistic sampling

provides a convenient technique to recruit a population, which represents a larger population.

Probability sampling is a significant technique for quantitative researchers. A quantitative researcher, using probabilistic sampling, selects a small population that represents a larger population to apply generalization (Rea & Parker, 2014). Probability sampling provides the best opportunity for all prospective participants of the sample population to have an equal opportunity to participate in a research study, which reduces potential sampling error (Martin & Bridgmon, 2012). Ishak and Abu Bakar (2014) and Omair (2014) asserted that probabilistic sampling techniques provide quantitative researchers with a technique to acquire the desired sample size and accurate representation of the larger population. Because simple random sampling involves the representation of an entire probabilistic population, using random sampling provides an opportunity for quantitative researchers to generalize to the larger population (Sheperis, Young, & Daniels, 2017). Probability sampling allows access to a probabilistic sample of the entire population.

Random sampling is a technique of probability sampling. Using random sampling provides an equal opportunity for the probabilistic sample of the population to participate in the study (Barreto & Raghav, 2013), whereas, the inability to gather an appropriate sample of the total population would pose a potential weakness of the study (Mass-Hebner et al., 2015; Omair, 2014). I randomly recruited 155 nurses from conducting presentations and meetings within nursing units and various departments, distributing to survey packets to the staff. Participants who desired to participate in the survey were

instructed to forward the completed survey via United States Postal Service in the provided self-addressed stamped envelope or to deposit the survey in a locked box located in a designated area. Limiting the sample to a select population could impede interpretation and generalization about the population (Acharya, Prakash, Saxena, & Nigam, 2013). Understanding the strengths and weaknesses of probabilistic sampling may help to expand knowledge to achieve research goals. Ultimately, probability sampling offers an ideal method to reduce potential bias Lacy, Watson, Riffe, & Lovejoy, 2015). As a result, probability sampling provides researchers with advantageous techniques apply a generalization to a large population of a study.

Larger sample sizes may help to validate research findings. Appropriate sample size may contribute to validate a research study because it can affect the statistical significance of the results (Bezzina & Saunders, 2014). Smaller sample size may compromise statistical values (Sijtsma, 2016). Acquiring an adequate sample size increases the validity of statistical measurement outcomes (Singh & Masuku, 2014). In New York, the estimation of the total number of registered nurses is approximately 260,000 (U.S. Department of Labor, Bureau of Labor Statistics, 2017a). The representation of registered nurses in New York provided a sufficient population to represent an appropriate sample of the population for this study.

G*Power can determine the sample size for a research study. G*Power 3.19 software calculates the precise sample size required to acquire conclusive research results (Faul, Erdfelder, Buchner, & Lang, 2009). Furthermore, Martin and Bridgmon (2012) asserted that a priori power analysis combines the alpha level, sample size, and estimated

medium effect size to validate decisions related to the null hypothesis. Power analysis

represents a practical approach to determine statistical power related to Type I and Type

II errors (Martin & Bridgmon, 2012). Taper and Ponciano (2016) explained Type I error

that denotes a researcher who rejects the null hypothesis without knowing the status is

true; a Type II error indicates when a researcher fails to reject the null hypothesis without

knowing if the status is false. Faul et al. (2009) and Singh and Masuku (2014) explained

the use of G* power of 0.80, a median effect size equal to $f^2 = .15$, and an alpha level of α

= .05, the minimum appropriate sample size estimated 68 participants for this study. With

an increase in the power and strength to 0.99, a median effect size equal to $f^2 = .15$, and

an alpha level of $\alpha = .05$, the sample size would require 146 participants. This research

study included 155 participants, which exceeded the power value of .99 with the

requirement of 146 participants (as displayed in Figure 2).
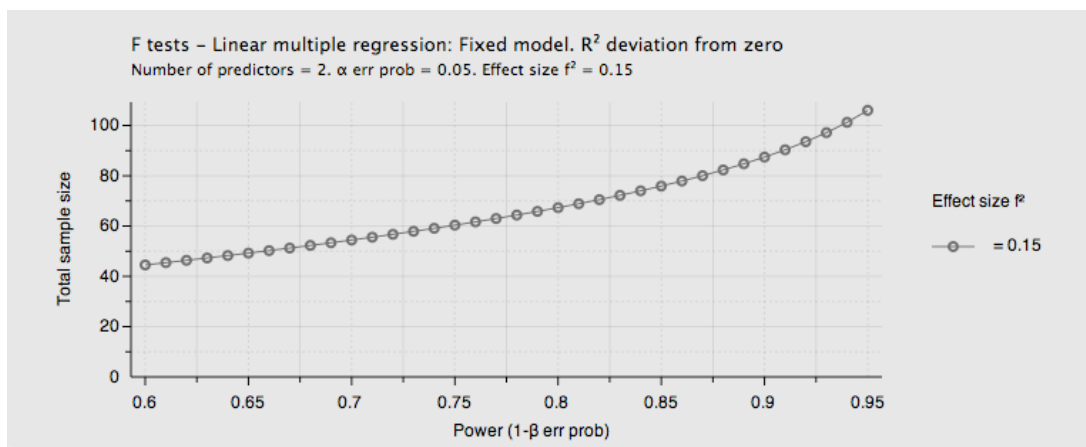
Figure 2. Power as a function of sample size.
Note: Adapted from Statistical Power Analyses Using G*Power 3.1: Tests for Correlation
and Regression Analyses (Faul et al., 2009).

Although registered nurses work in various healthcare settings, the selected nurses had to meet specific inclusion criteria for this study. Inclusion criteria identify the appropriate characteristics of the targeted population (Martin & Bridgmon, 2012) and ensure alignment with the research questions (Sommestad et al., 2014). The inclusion criteria for this study included (a) employment as a registered nurse, (b) full-time employment at a hospital in New York, and (c) a minimum of 2 years of work experience as a registered nurse at their current hospital of employment. McElroy and Ladner (2014) described exclusion criteria as the population whose characteristics do not meet the qualifications for the research study. The exclusion criteria for this study were (a) nonregistered nurses, (b) registered nurses working in outpatient healthcare facilities, jails, or schools, (c) registered nurses with less than working experience, and (d) pregnant women. Identifying inclusion and exclusion criteria may help researchers clarify specific types of participants for research studies.

Ethical Research

Researchers must always consider ethical compliance. Once ethical compliance became a significant concern, implementation of informed consent in human and social sciences became a requirement. Sobottka (2016) noted that ethical compliance had become a significant concern, which drove the implementation of informed consent in human and social sciences. Informed consent requires researchers to acquire permission from prospective participants before engaging in a research study (U.S. Department of Health and Human Services, 1979). The U.S. government implemented regulations for the strict enforcement of legal protection of human participation in research studies

(Mikesell, Bromley, & Khodyakov, 2013). These regulations included ensuring data privacy, minimizing potential harm or risks, and interpreting data to yield valid and reliable results (Guzzo, Fink, King, Tonidandel, & Landis, 2015). Humphreys (2015) suggested that disrespecting the rights of prospective participants could compromise participation. Requiring informed consent has improved researchers' accountability for adhering to principles of research involving human subjects.

Walden University's Institutional Review Board (IRB) mandates that all doctoral students undergo National Institute of Health Web-based training entitled "Protecting Human Research Participants." I included Walden's IRB approval number, 03-13-18-0176159, and the expiration date of March 12, 2019. Sijtsma (2016) emphasized the importance of avoiding the temptation of unethical practices, which could interfere with the accurate processing of quality results. McLeod, Payne, and Evert (2016) conducted a literature review of 184 articles to analyze the knowledge and understanding of ethical practices and recommendations for improvement. McLeod et al. found a discrepancy existed between the individual's perspective of ethics and ethical practices, which may interfere with resolving problematic issues. The authors stressed the significance of researchers' roles to improve ethical practices. Therefore, for any potential participant's inquiries or questions, I provided contact information for a Walden University's representative and myself. Providing contact information creates the opportunity to furnish additional details, address inquiries, or mitigate any ethical concerns (Nelson, 2016). Acquiring professional ethical training and knowledge heighten moral obligations and responsibilities and help ensure ethical protections.

Data collection begins once a participant provides informed consent. To comply with Walden University's regulations, I acquired implied informed consent from the prospective participants' completion of the survey rather than having participants sign an informed consent form. Implied informed consent represents an informal endorsement of participants' voluntary participation as a validation of consent to partake in a research study (Humphreys, 2015). Grady (2015) described informed consent as a legal agreement between a researcher that protects participants' act to participate or decline participation in a research study. Researchers must inform all prospective participants about the study's purpose before involvement in a research study (Bromwich, 2015). Durà-Vilà (2013) emphasized the obligation of researchers to enhance participants' level of understanding to acquire informed consent. Some populations may experience challenges in understanding informed consent. Providing informed consent correspondence in participants' preferred language may enhance accuracy and clarity (Litwin, 2016). Perhaps most importantly, obtaining informed consent may help to establish an honest relationship between the researcher and the potential participants.

Requiring voluntary agreement provides a choice to participants for research participation. The voluntary agreement involves adherence to informed consent statements, which must emphasize the flexibility to withdraw at any time (Holian & Coghlan, 2013). Aziz, Uhrich, and Wuensch and Swords (2013) conducted a study on the subject of workaholism involving 188 participants from various professional backgrounds. Aziz et al. distributed informed consent forms to all participants before survey completion and emphasized their right to withdraw at any time. In this research

study, participants had the opportunity to leave during data collection or up until the

publication of a dissertation without fear of retaliation; no one elected this option.

Some researchers offer incentives to entice research study participation. Z. Lee

and Cheung (2014) offered $15 shopping vouchers, and Williams et al. (2015)

coordinated a raffle drawing for an iPad mini and $20 iTunes gift cards to encourage

participation in their research study. Fisher (2013) indicated that researchers must control

the value of the incentive to ensure voluntary participation and to discourage coercion.

Hadjicharalambous and Shi (2015) conducted a study without providing incentives and

attained a sufficient sample size of 683 participants with an overall response rate of

75.4%. Researchers disagreed about the benefits of providing incentives to research

participants. However, I did not distribute incentives as a method to recruit prospective

participants.

Displaying documents provides visual elements for readers. Appendices include

reference information aligned with the research study to enhance readers' understanding

and clarity. Appendix A displays the letter of invitation to participants. Appendix B

displays the Work & Well-being Survey (UWES-9). Appendix C displays the Job

Satisfaction Survey. Appendix D displays the Turnover Intension Scale. Appendix E

displays the Demographic Questions. Appendix F displays the Thank- You Letter, which

expresses appreciation for participants' involvement and contribution toward the research

study. Appendices G and H displays the permission to use the Work & Well-being

Survey (UWES-9), and the Job Satisfaction Survey. Appendices I and J include the

request letter and the permission letter,to use the TIS. Appendix K displays the combined survey.

Proper storage of data ensures confidentiality. I collected and stored data securely and will maintain this for a 5-year term to protect the confidentiality of participants. Folder Lock 7.3, which represents a popular data encryption software program, will store data on my password-protected computer. Using an encryption software program combined with a password-protected computer will improve the security of confidential information. James, Nottingham, and Kim (2013) noted that the use of software tools, such as encryption programs, could reduce incidences of user vulnerability and risk for data security. Data encryption provides some advantages to secure data from external forces but does not remedy abusive activities related to illegal accessibility (Clarke, 2013). Although data encryption software increases confidentiality, de Albuquerque and dos Santos (2015) found that some research institutes do not engage in securing research data. Researchers must protect data to ensure the confidentiality of participants.

Participants interested in research or consultation services may request access to the raw data from this research study for a 5-year term. After the expiration of the term, I will destroy all electronic data to comply with research confidentiality and compliance regulations. McDonald and Léveillé (2014) asserted establishing retention periods, as well as initiatives for disposal activities; early in the research study helps to ensure data security. Sheperd and Yeo (2003) reported that maintaining proper record management protects against serious risks and consequences. Zezula (2015) identified challenges with raw data related to processing, storage, security, and retrieval. Mani, Kim-Kwang, and

Mubarak (2014) noted that improper protocols for the destruction of data heighten risks for disclosure of sensitive information. Researchers may increase participation by ensuring the protection of participants' data. Securing data through data encryption software may help minimize or eliminate the risk and lower illegal access to participant data.

Also, to ensure fulfillment of the requirements anonymity and confidentiality, I did not collect any names on the surveys or any signatures on the informed consent. Dinev, Xu, Smith, and Hart (2013) indicated that anonymity might help ensure protection. In contrast, Petersen, Allman, and Lee (2015) noted that providing anonymity may increase accurate survey responses, especially with health and financial inquiries. I secured confidentiality by requesting each participant to deposit the survey in a locked box. Benkhadra et al. (2016) conducted a quantitative study, which involved analyzing the healthcare needs of physicians in the United States. During the data collection phase, the researchers required participants to deposit completed surveys in a drop box. Providing a locked box to store the participants' surveys may heighten participants' level of confidentiality.

Data Collection Instruments

Quantitative researchers use a variety of instruments for data collection to examine variables. Haneef (2013) asserted quantitative research involves analyzing the relationships of variables after generalizing from a sample of the larger population to make predictions. For this study, I collected data from demographic questions, the Work & Well-being Survey (UWES-9), the Job Satisfaction Survey (JSS), and Turnover

Intention Scale (TIS) instruments to examine and measure the independent and dependent variables. An independent variable refers to predicting the relationship between another variable whereas a dependent variable relates to the outcome of the predictor variables (C.-H. Ko & Jeng, 2016). The Work & Well-being Survey (UWES-9) measured work engagement; the JSS measured job satisfaction, and TIS measured nurse turnover intention. Jebarajakirthy, Lobo, and Hewege (2014) also combined validated instruments into one paper-based survey for data collection. Also, other quantitative researchers have used more than one instrument in their studies (P. Ghosh et al., 2015; Roof, 2015). The use of one instrument in a quantitative study is common.

Utrecht Work Engagement Scale

The Work & Well-being Survey (UWES-9) was the first instrument in this research study, Schaufeli and Bakker (2004a) developed the original Work & Well-being Survey (UWES) to measure work engagement, characterized by vigor, dedication, and absorption, the assumed opposite of burnout. The original Work & Well-being Survey (UWES) consisted of a 24-item survey, followed two shorter surveys consisting of 17-items, both surveys used a seven-point Likert-type ordinal scale ranging from 0 = *never* to 6 = *always*. Likert-type scales provide participants with a rating gauge to promptly answer closed-ended, survey questions (Moy & Murphy, 2016). After conducting a psychometric evaluation, Schaufeli and Bakker eliminated seven items, as they did not demonstrate value or positive contribution to the overall survey. Moving from the 24-item to 17-item, the Work & Well-being Survey (UWES) strengthened the overall effectiveness of the instrument for subsequent use in research studies.

The Work & Well-Being Survey (UWES-9) evolved from the Work & Well-being Survey (UWES). Schaufeli, Bakker, and Salanova (2006) approved the removal of eight items to design the Work & Well-being Survey (UWES-9), a shortened version from the earlier 17-item version of the Work & Well-being Survey (UWES). Kulikowski (2017) conducted 21 studies and found that researchers preferred the Work & Well-being Survey (UWES-9) in comparison to the 17-items Work & Well-being Survey (UWES) as it revealed a higher degree of validity and reliability. The Work & Well-being Survey (UWES-9) represents a 9-item instrument measuring work engagement dimensions of vigor, dedication, and absorption (Seppälä et al., 2009). Shuck, Zigarmi, and Owen (2015) used the Work & Well-being Survey (UWES-9) to test the psychological underpinning to understand work engagement and performance. Schaufeli et al. (2002) described vigor as high-level energy toward the commitment of an employee's work regardless of encountering positive or negative obstacles. Dedication equated to a profound enthusiasm and commitment of pride toward an individual's work (Schaufeli et al., 2002). Absorption represented an individual's engrossment in an employee's work with unnoticeable time passing while having difficulty withdrawing from work activities (Schaufeli et al., 2002). The Work & Well-being Survey (UWES-9) presents as a satisfactory instrument to measure the level of work engagement from employees.

Examining registered nurses' level of work engagement may help discover the relationship with job satisfaction that often leads to turnover intention. Using reliable and valid instruments has an advantage in reducing error variances (Longo, Gunz, Curtis, & Farsides, 2016). The Work & Well-Being Survey's (UWES-9) Cronbach's alpha internal

consistency reliability coefficient ranges from.89 to.97 (Schaufeli & Bakker, 2004a), and reflects good construct validity (Seppälä et al., 2009), representing a good indicator for a reliable and valid instrument. Because of the Work & Well-being Survey (UWES) and the Work & Well-being Survey (UWES-9) measure work engagement consistently, the Work & Well-being Survey (UWES-9) represents an appropriate instrument to test work engagement because of the instrument's strong reliability and validity measures for this study.

I used quantitative methodology and administered paper-based surveys to collect data from participants who met the criteria among the registered nurses employed in hospitals located in New York. At each hospital's nurses' meeting, I conducted a presentation and informed the prospective participants of the research study. I informed the prospective participants that the study would include three tools, one of which was the Work & Well-being Survey (UWES-9). The Work & Well-being Survey (UWES-9) included nine items and took approximately 3 minutes or less to complete. Providing information to participants may help to increase participation.

The Work & Well-being Survey (UWES-9) provides a standard method to score variables. The variable of work engagement denotes a continuous variable by totaling the scores of vigor, dedication, and absorption based on the score range of 0 (never) to 6 (always) and obtaining the average of the responses to all nine questions (Schaufeli & Bakker, 2004a). Higher scores report higher levels of work engagement (Shu, 2015; Shuck et al., 2015). For example, Fluegge-Woolf (2014) conducted a quantitative study, which consisted of 245 employed students at a large southeastern university, to

understand the correlation between fun at work, task performance, organizational

citizenship, creative performance, and work engagement. Fleece-Wolf used the Work &

Well-being Survey (UWES-9) to measure work engagement and found a direct

correlation between fun at work and work engagement. Schaufeli et al. (2006) and

Seppälä et al. (2009) validated the Work & Well-being Survey (UWES-9) has an

excellent reputation for validity and internal consistency. For this study, the Work &

Well-being Survey (UWES-9) was an appropriate tool to measure work engagement.

Various research studies and countries have validated the use of Work & Well-

being Survey (UWES-9). The popularity of the Work & Well-being Survey (UWES-9)

has extended to more than14, 000 employees from 10 different countries, (Schaufeli et

al., 2006). A vast number of researchers employed the Work & Well-being Survey

(UWES-9) to measure work engagement for their research studies (Shuck et al., 2015;

Ugwu et al., 2014). Karanika-Murray, Duncan, Pontes, and Griffiths (2015) conducted a

quantitative study, which consisted of 177 United Kingdom employees to examine

organizational identification, job satisfaction, and work engagement. Organizational

identification refers to a connection with an employee's employer (Karanika-Murray et

al., 2015). Karanika-Murray et al. found a significant and positive relationship between

organizational identification and work engagement. Ünal and Turgut (2015) conducted a

quantitative survey, which involved 285 workers from diverse industries in Turkey, to

examine the relationship between person-organization value and work engagement. Like

Karanika-Murray et al., Ünal and Turgut measured work engagement using the Work &

Well-being Survey (UWES-9) and found the tool successfully predicted the influence of

job resources and positive relationships with supervisors associated with work engagement. Kataria, Rastogi, and Garg (2013) conducted a quantitative study, which consisted of 304 middle managers from IT organizations to understand the correlation between the relationship between work engagement and perceived organizational effectiveness. Kataria et al. found the workers' perception of organizational effectiveness affected their level of work engagement (e.g., vigor, dedication, absorption, and productivity). Consistent with Karanika-Murray et al., and Ünal and Turgut, Kataria et al. found that work engagement may significantly influence organizational effectiveness. For this study, I used the Work & Well-being Survey (UWES-9), based on the use of the instrument in various studies and the validation of several researchers.

The Work & Well-being Survey (UWES-9) preceded the JSS and the TIS instruments. The Work & Well-being Survey (UWES-9) uses internal consistency reliability (Cronbach's alpha) with ranges from .89 to.97 (Schaufeli & Bakker, 2004a), and confirmatory factor analysis to affirm the construct validity of the Work & Well-being Survey (UWES-9; Seppälä et al., 2009). De Bruin and Henn (2013) administered the Work & Well-being Survey (UWES-9) throughout 10 countries confirming Seppälä's et al.'s findings with a reliability score of 0.92 to validate a reliable instrument. The Work & Well-being Survey (UWES-9) may help identify factors associated with nurse turnover intention.

In this study, I did not alter the psychometric properties of the Work & Well-being Survey (UWES-9). Based on the instrument's reputation of internal consistency (Schaufeli et al., 2006) and good construct validity (Seppälä et al., 2009), the Work &

Well-being Survey (UWES-9) represents a valid and reliable instrument, which would not require alteration to the tool. Some researchers conduct pilot studies to validate the reliability and validity of an instrument (Emami & Safipour, 2013); other researchers may choose to modify an existing instrument (Abu-El Samen, Akroush, & Abu-Lail, 2013). Researchers may modify instruments when reliability and validity reveal inconsistency (M. S. Sharma & Halvadia, 2015). In this current study, because of earlier validation from other researchers, I did not modify the instrument.

I acquired permission from researcher Schaufeli to use the Work & Well-being Survey (UWES-9) featured in Appendix G. Appendix B displays the sample Work & Well-being Survey (UWES-9) for data collection administration. Vaingankar et al. (2014) incorporated a variety of instruments and acquired permission for the use of each instrument from the designers, as needed. Also to acquiring permission for using the Work & Well-being Survey (UWES-9), establishing measures to secure raw data heightens data confidentiality in research studies. For 5 years, following approval from Walden's Chief Academic Officer, all participants will have the opportunity to request raw data from me, the researcher. Obtaining permission to use instruments and the availability of raw data follows Walden's study protocol and guidelines.

Job Satisfaction Survey

The Job Satisfaction Survey (JSS) represents the second instrument in this research study. Spector (1985) developed the JSS to measure employees' view of job-related aspects affecting their level of satisfaction. The JSS consists of nine job-related constructs with four underlying variables per job-related construct (Spector, 1985). The

nine job-related constructs include (a) pay, (b) promotion, (c) supervision, (d) fringe benefits, (e) contingent benefits, (f) operating procedures, (g) coworkers, (h) nature of work, and (i) communication (Spector, 1985). Understanding the relationship of job-related aspects may help to improve employees' job satisfaction.

Each construct of the JSS measures job-related dimensions. Spector (1997) described each measurement for the four underlying variables per construct, totaling 36 items. The pay construct measures the salary paid to an employee in exchange for work duties. The promotion construct measures the likelihood of promotional opportunities. The supervision construct measures the relationship with an employee's immediate supervisor. The fringe benefits construct measures the level of satisfaction with monetary and nonmonetary fringe benefits. The contingent rewards construct measures the reward and recognition of work efforts. The operating procedures construct measures the operating policy and procedures of the organization. The coworkers construct measures the interaction with the people at work. The nature of work construct measures the value of job tasks. The communication construct measures the effectiveness of communication throughout the organization. Measurements of constructs determine the correlation among constructs and job satisfaction.

Job satisfaction represents a significant predictor of employee outcomes. Spector tailored the JSS specifically for use in human service organizations, as well as the public, nonprofit organizations (Spector, 1985). The JSS consists of a six-point Likert-type ordinal scale ranging from 1 (disagree very much) to 6 (agree very much). Spector investigated the correlation of job satisfaction from various employee attitudes and job-

related aspects involving 2,870 participants from organizations representing the Southeastern United States. Batura et al. (2016) tested the JSS to determine the quality of measuring job satisfaction. Batura et al. found that the majority of the items positively correlated with each other and the overall value of Cronbach's Alpha coefficient exceeded 0.7, which validates the reliability of the instrument. Based on the high ratings of the JSS's reliability and construct validity, Spector concluded that the JSS represented a reliable and valid instrument to test the satisfaction level of human service employees. With registered nurses, who represent employees from the human service sector, as well as the extended use in numerous research studies, the JSS is an ideal instrument to measure the level of job satisfaction.

Items in the JSS incorporate both positively- and negatively-worded statements. Therefore, during analysis, the JSS requires the use of reverse scoring (Spector, 1985, 1997). Regarding each of the four constructs, average scores that range from 4 to 12 represent dissatisfaction. Scores exceeding 16 represent satisfaction, and scores ranging from 13 to 15 reflect a mixed feeling of satisfaction and dissatisfaction (Spector, 1994). Thus, the measure of job satisfaction ranges from 36 to 216, with higher scores signifying higher levels of job satisfaction. For example, Orhan, Rijsman, and van Dijk (2016) conducted a quantitative study, which consisted of 278 participants originating from various countries and employment to examine the correlation between workplace isolation, job satisfaction, self-performance, and turnover intention. The researchers used Spector's (1985) JSS, in which they employed reverse scoring to measure job

satisfaction. Scoring the JSS requires proper calculations to conclude accurate research findings.

Positive and negative levels of job satisfaction affect organizations. Because the educational industry encompasses a human service foundation, the JSS has become a popular tool to measure job satisfaction among educators (Saiti & Papadopoulos, 2015). For example, Saiti and Papadopoulos (2015) conducted a quantitative study, which studied 188 primary school teachers in the Metropolitan area of Athens, Greece, to examine their level of job satisfaction. The researchers found teachers reported satisfaction with their administration, colleagues, and the nature of work, but dissatisfaction with salary benefits, rewards, and no significant association with personal characteristics. Moreover, Sait and Papadopoulos emphasized the importance of satisfying teachers for retention strategies needed to enhance the quality level of Greek education. Darmody and Smyth (2016) acquired data from the research of Williams et al. (2009) *Growing up in Ireland: The national longitudinal study of children-The lives of 9-year-olds*. The study included principals from 898 schools to examine the relationship between occupational stress and job satisfaction. In similarity to Sait and Papadopoulos, Darmody and Smyth found no relationship existed between personal characteristics between age and gender. However, Darmody and Smyth found a negative relationship existed between tenure, job satisfaction, and occupational stress. Employees who encounter job satisfaction have a higher tendency to remain loyal to their employer than those who face dissatisfaction George & Zakkariya, 2015). In this study, I did not

specifically seek satisfaction. Moreover, I sought to determine the influence of job satisfaction on turnover intention.

Operating procedures and limited promotional opportunities could also lead to turnover intention. Fila, Paik, Griffeth, and Allen (2014) conducted a quantitative study, which consisted of 343 human service workers consisting of family social service caseworkers, supervisors, and administrative staff to investigate job-related aspects related to job satisfaction. Like Saiti and Papadopoulos (2015), Fila et al. found employees experienced positive satisfaction with supervision, coworkers, autonomy, task variety, and nature of work. However, these employees noted dissatisfaction with salary, rewards, operating procedures, and limited promotional opportunities. In assessing the important element of job satisfaction, Fila et al. found a negative correlation between role overload and role conflict. Leider, Harper, Shon, Sellers, and Castrucci (2016) acquired data from the 2014 Federal Employee Viewpoint survey and the 2014 Public Health Workforce Interests and Needs Survey, which consisted of 2,400 Federal, State, and Local public health employees. The researchers examined the relationship between demographics, job satisfaction, and intention to leave employment, finding that a strong relationship existed between job satisfaction and intention to leave. Based on these findings, the researchers acknowledged the value of employees' through the distribution of rewards, benefits, and promotional opportunities could help improve employee's perception of appreciation and job satisfaction and possibly reduce their intention to leave.

Researchers must always use a reliable instrument. Spector (1997) reported the JSS' internal consistency (coefficient alpha) with a total measurement of .91, as well as the test-retest reliability yielding high scores of .37 to .74. Strategies using Cronbach alpha measuring internal consistency (Borah & Malakar, 2015), test-retest measurements, and an instrument's reliability (Riva, Gorini, Cutica, Mazzocco, & Pravettoni, 2015) confirm the validity and the reliability of an instrument. With JSS Cronbach's alpha and test-retest measurements acquiring high scores, as well as the validation of other researchers using the instrument in various studies, the instrument did not require modification. The JSS took approximately 5 minutes, or less to complete. Appendix H displays the permission letter granted by Dr. Paul E. Spector to use the JSS. Appendix C displays the sample JSS for data collection.

Turnover Intention Scale

The Turnover Intention Scale (TIS) represents the third instrument used in this research study. Mobley, Horner, and Hollingsworth (1978) designed a simplified version of Mobley's (1977) original Turnover Intention Scale, which was designed to measure the underlying factors of employees' turnover intention. The revised TIS consists of a three-item survey. The survey includes the following statements: (a) I often think about quitting my present job; (b) I will probably look for a new job in the next year; and (c) As soon as it is possible, I will leave the organization (Mobley et al., 1978). Hom, Griffeth, and Sellaro (1984) posited that each construct might have a direct, interrelated effect on employees' intent to quit. Each construct is rated using a 5-point Likert-type ordinal scale ranging from 1 (strongly disagree) to 5 (strongly agree) (Mobley et al., 1978). The first

construct measures the level of job satisfaction that would influence thoughts of quitting. The second construct measures employees' intention to search for alternate employment options. The third construct measures employees' plan to quit (Hom et al., 1984). S. Z. Malik and Khalid (2016) emphasized the significance and value of employees' contribution to an organization, which could improve financial gains. The TIS represents a strong instrument to measure turnover intention, which may identify variables to reduce turnover intention.

Researching the causes of turnover intention may help organizations' management. The replacement of employees results in a wide range of costs (Tziner et al., 2014). Mobley (1977) discovered the psychological process, which dissatisfied employees undergo when deciding to quit. Mobley posited employees undergoing the psychological process will conduct the following: (a) assess their level of satisfaction or dissatisfaction with their employer and his or intention to quit; (b) evaluate consequences and the costs of leaving their job; (c) conduct a job search; (d) a compare their current job to a prospective job; (e) evaluate job alternatives, and may (f) pursue intention to quit, which may lead to turnover. Mobley et al. determined the TIS as an acceptable measure of turnover intention. In a study of 203 hospital employees, Mobley et al. used the TIS to examine job satisfaction, interests in terminating employment, and whether the employees were searching for alternate employment. Chi, Friedman, and Lo (2015) supported the TIS as an accurate instrument to predict turnover intention. Various researchers have used and validated the accuracy and appropriateness of TIS in their research study to measure turnover intention (Almandeel, 2017; P. Ghosh et al., 2015;

Islam, Ahmed, & Ahmad, 2015). The TIS measures both employees' turnover intention and turnover intention related to turnover (Mobley et al., 1978). Given the objectives of this study, the TIS provided an appropriate, validated, and reliable approach to answer the research questions.

The administration of the TIS represents one of four instruments provided to participants in the survey packet. Therefore, participants followed the same procedures as they did when completing the Work & Well-being Survey and the Job Satisfaction Survey. With the composition of three items in the TSS, the estimated time for completion was one minute or less. Scoring the TIS involves obtaining the average scores of the response corresponding to each item; high overall scores will reflect a higher turnover intention to leave the organization (Azanza et al., 2015; Yin-Fah, Foon, Chee-Leong, & Osman, 2010). Computing average scores from data helps to determine the value of the research findings.

Many researchers have confirmed the TIS as a valid and reliable instrument to use in research studies. The use of Cronbach alpha is a popular measurement to test the reliability of an instrument (Borah & Malakar, 2015). Tziner et al. (2014) conducted a quantitative and cross-sectional study, which consisted of 125 employees from a public organization; the researchers wanted to examine the relationships between employees' attachment style, job satisfaction, and work centrality with turnover intention. The results from the TIS revealed a direct correlation between job satisfaction and turnover intention, but no significant relationship between work centrality and turnover intention. Walker (2013) used the TIS to conduct a quantitative study, which included 216 StudyResponse

participants in the United States, to examine the correlation between individuals' faith at work, life satisfaction, job performance, and intent to quit. Walker's study involved participants of various demographic backgrounds. Surprisingly, unlike Tziner et al. (2014), Walker found that individuals' perceptions reflected encouragement acquired from their faith in God to pursue alternate employment opportunities at other organizations. Mobley (1982) validated turnover intention does not necessarily encourage turnover, but it represents a quality instrument of predicting turnover intention. Researchers who use the TIS heighten their awareness of the relationship between variables and their influence on turnover intention.

Some researchers identified employees' perception of various types of work-related support and turnover intention. Tüzün, Çetin, and Basim, (2014) conducted a quantitative study, which included 255 academicians of state and foundations in Turkey, to examine the relationship between perceived organizational support, perceived supervisory support and turnover intention. The researchers found a negative relationship existed between the employees' perceived organizational support, perceived supervisory support, and turnover intention. Islam et al. (2015) conducted a quantitative study, which involved 758 bank employees in Pakistan, to examine the relationship between organizational learning culture, perceived organizational support, affective commitment, and turnover intention. Similar to Tüzün et al., Islam et al.'s findings revealed a negative relationship existed between the bank employees' perceived organizational support, organizational learning culture, and turnover intention. Also, both studies revealed high Cronbach alpha coefficient measurements of 0.93 and 0.88. Attaining a high Cronbach

alpha measurement confirms the reliability and validity of the TIS (Mobley, 1982). With a high Cronbach alpha rating, the instrument did not require modification. Appendix I displays the Permission Letter Request to Dr. William Mobley to provide authorization to use the TIS. Dr. William Mobley granted permission to use the TIS featured in Appendix J. Appendix D displays the sample Turnover Intention Scale for data collection administration. Some researchers have found the TIS to analyze the relationship between variables and turnover intention.

Demographic Survey

Examining demographic data may provide insight into nurse turnover intention. The demographic survey includes six questions related to age, gender, race, ethnicity, number of years working as a registered nurse, and number of years working at the current hospital, as a registered nurse. Also, I included the frequency distributions displaying demographic data in data analysis. Quantitative researchers use frequency distributions to represent the most common measurements using the mean, mode, median, and standard deviations (Green & Salkind, 2013). Appendix E provides the sample demographic questions used for data collection. Many researchers use demographic characteristics to examine the relationship and the influence on variables (de Oliveira et al., 2017; Ostermeier & Camp, 2016; Yang et al., 2017). Analyzing demographic data proved useful when studying participants' characteristics and their relationships with work engagement and job satisfaction, as well as their influence on nurse turnover intention.

Data Collection Technique

For this study, I employed a quantitative methodology, distributing survey packets with enclosed paper-based surveys to collect data from participants who meet the criteria among the target population: registered nurses employed in hospitals located in New York. At each hospital's nurses' meeting, I conducted a presentation and informed the prospective participants of the research study. I informed the prospective participants that the study would include three tools, one of which was the Work & Well-being Survey (UWES-9). The Work & Well-being Survey (UWES-9) took approximately 3 minutes, or less to complete. The Job Satisfaction Survey represented the second instrument and took 5 minutes, or less to complete, and the Turnover Intention Scale represented the third instrument and took about one minute to complete. I did not collect any identifiable information from any participants. Surveys represent the data collection technique commonly used in quantitative methodology (Agoston, 2014) and offer both advantages and disadvantages when compared to other data collection techniques (Tella, 2015). Assessing circumstances may help researchers to determine the appropriate data collection technique for a targeted population. I explained the requirement of implied informed consent to prospective participants. Harris et al. (2017) conducted a literature review, qualitative, and quantitative methods, which included members of the Technology/Clinical Practice Committee, to analyze decision-making methods related to disinvestment with an Australian health service. During the recruitment, Harris et al. explained implied informed consent included participation in research study activities

such as interviews, completion of surveys, workshops. Providing information to participants about the research study may increase their participation.

For this study, I distributed survey packets and #2 pencils to all prospective participants. Also, I provided light refreshments for all individuals present in the room. For the convenience and comfort of the prospective participants, I had clipboards, available. The survey packets included (a) a letter of invitation, (b) an informed consent form, (c) a survey tool, combined from three instruments, (d) a demographic questionnaire, and (e) a thank-you letter. The informed consent form included information related to the background, purpose, risks, and benefits to heighten the understanding of the procedural research process for each prospective participant. The survey instruments included the Work & Well-being Survey (UWES-9), the JSS, and the TIS, totaling 48 survey items, excluding 6 demographic questions. Also, I placed a locked box in a designated, serving as a receptacle for completed surveys.

During the presentation, I introduced myself and explained the purpose of the research study and the benefits to the healthcare sector. I also explained the confidentiality of the process and the anonymity of the survey. Furthermore, I discussed the requirement for completed surveys and that I would eliminate and discard any incomplete surveys. I informed prospective participants that the survey participation was voluntary and that everyone had the right to decline participation at any time without explaining. Also, I directed prospective participants to Walden's representative and my contact information in the survey packet, to address privately any questions or concerns. For example, I reinforced that anyone who decided not to participate could discard the

survey packet. Should a participant wish to withdraw his or her survey after completion, the participant could contact me. To withdraw his or her completed survey, the participant needed to provide me with his or her 5-digit code that was affixed to the informed consent form, the research study survey tool, and the demographic questionnaire. Once I have identified his or her survey with the 5-digit code, I would remove the survey and questionnaire from the collection of surveys. However, no one chose this option.

To avoid responders' bias, I did not offer any advice or attempt to coerce participation in the survey. I informed prospective participants that I would store the completed paper-based survey in a fire-proof safe for 5 years. I formatted and transferred the numerical values into an Excel spreadsheet and then imported data into SPSS for data analysis. As an additional measure to provide privacy and confidentiality, participants could either forward their survey to my USPS post office box or deposit the survey in the locked box.

For this research study, I used paper-based surveys to gather data to answer the research question. The research question inquires: "Do work engagement and job satisfaction predict nurse turnover intention in hospitals?" Quantitative researchers seek to answer the research questions by testing the hypotheses (Figgou & Pavlopoulos, 2015) and using numerically driven data collection techniques (Higham, Fortune, & Boothman, 2016). The objective of the research study was to examine the relationship between these variables to make predictions of outcomes. Inaccurate measurement of a study's variables may significantly affect the objective of this research study (Onen, 2016). This section

consisted of the advantages and disadvantages of using paper-based surveys, as well as validated its use for acquiring final data to reject or accept the null hypotheses.

In this study, I distributed surveys for data collection. An advantage of employing quantitative research is the use of scientific methods to avoid bias in data collection methods (Cerniglia et al., 2016). Surveys are the most popular type of data collection method for quantitative research (Figgou & Pavlopoulos, 2015; Lopes, 2016). Also, surveys can facilitate the acquisition of sampled data from participants, while providing opportunities to predict and analyze relationships between variables, as well as to generalize about a population (Haneef, 2013). In the same vein, Jung, Kim, and Farrish (2014) conducted a quantitative study, which included 244 hoteliers, in the United States, to examine the influence of in-room technologies and increase in business performance. The researchers' findings revealed a significant and positive relationship existed between in-room technologies, the customer experience, and hotel revenue. However, Jung et al. cautioned that generalizing research findings might lead to inconclusive information that could affect accuracy. Therefore, Swartz, Amatucci, and Coleman (2016) asserted that a large representation of the total population might enhance generalization. Data collection via surveys provided an ideal solution for this research study.

Data collection required the approval of a senior-level executive at a hospital located in New York. The senior-level executive served as an intermediary to arrange research study presentations for the distribution of survey packets to recruit prospective research participants. The senior-level executive provided written approval to conduct the research study at his or her hospital. The Chief Nursing Offer designated a midlevel

manager to assist on the day of the distribution of the survey packets. At the convenience

of the midlevel manager, I scheduled the date for the research study presentation. Before

the research presentation date, I forwarded an e-mail, to the designated manager to

review procedures, address any concerns, and to discuss my arrival time. At the

convenience of the midlevel manager, I presented the research study before the nurses'

meeting, in a designated conference room of which time I distributed survey packets

affixed onto clipboards. Each participant had an option to forward the completed survey

by using a self-addressed stamped envelope to my U.S Postal Service post office box

address of could deposit the survey in the locked box, located in a designated area. At

each location, I set-up a small table, in the back of the room, with light refreshments for

anyone who entered, regardless of whether he or she decided to participate in the research

study. Developing organizational procedures in advance may have helped to provide an

efficient process for data collection.

Conducting a research study requires that researchers and participants adhere to

research protocol. Before the distribution of the survey packets, I provided a brief

introduction explaining the purpose, risks, and benefits of the research study, the

estimated time for survey completion, participation and withdrawal procedures, and

instruct everyone to turn off their electronic devices. I also informed prospective

participants that survey participation was voluntary, and they had the right to decline or

withdraw from the survey at any time, without explanation. Tam et al. (2015) reported

that voluntary participation stipulates participants have the right to withdraw, at any time.

Also, to avoid responder's bias, I did not offer any advice or attempt to coerce

participation in the study. I informed the requirement that all participants must provide informed consent. However, I explained that I would not require participants to sign a consent form, but that completion of the survey signified implied informed consent. In this study, I did not use any incentives, nor did I use coercion with any participants. Roster, Albaum, and Smith (2017) described incentives such as money or prizes, which researcher may offer prospective participants of their participation in the study. In contrast, coercion represents a forceful act to acquire compliance (Zendeh & Oskuie, 2017). Some researchers are discouraged from using coercion or incentivizing to recruit prospective participants (Fisher, 2013). A potential participant of my study could voluntarily elect to contribute to the study and withdraw anytime, without penalty.

For this study, I distributed survey packets with information about the research study. Each potential participant received a letter of invitation (Appendix A) attached to an informed consent form, which provided instructions not to provide any identifiable information. The informed consent form included information related to the background, purpose, risks, and benefits of the study to ensure understanding of the research process and objectives. The other remaining items in the survey packet included combined surveys, a demographic questionnaire, and a thank-you letter. The combined survey included three reliable and valid instruments, which consisted of the Work & Well-being Survey (UWES-9), the JSS, and the TIS, which totaled 48 survey items. I explained the importance of receiving complete versus incomplete surveys, as I would eliminate any incomplete surveys received. Wouters Maesschalack, Peeters, & Roosen (2014) recommended eliminating surveys with incomplete data to minimize misinterpretations

of participants' noncompliance. Tangmanee and Niruttinanon (2015) revealed that incomplete surveys might indicate a lack of interest by the participant. Fleischer, Mead, and Huang (2015) asserted that incomplete data might lead to inaccurate results. By explaining procedures to the prospective participants, it helped reduce misconceptions and errors in the research process.

As a researcher, I ensured that I would protect the participants' confidentiality. Maintaining privacy and confidentiality helps protect prospective participants from potential harm (Dissanayake, 2015). During the anonymous survey, I exited the room to provide additional privacy. Rubinstein and Hartzog (2016) asserted that ensuring to protect participants' privacy even by providing anonymity continues to impose challenges. The survey packet included Walden's representative and my contact information for participants to address privately any questions or concerns. I informed prospective participants that they could cease participation in the survey, at any time by discarding the survey packet or requesting the removal of his or her surveys by identifying the private 5-digit code. I stored the completed paper-based surveys in a fire-proof safe and will keep them there for 5 years. I will secure raw data in my password-protected laptop with an encryption software program for added security. Proper management of records protects participants' confidentiality (McDonald & Léveillé, 2014). I formatted and transferred the numerical values into an Excel spreadsheet and then into SPSS for data analysis. Establishing measures to protect participants' rights may increase participation and fulfill ethical principles.

After completion of the survey, participants placed his or her survey in the locked box with instructions displayed: *Please Deposit Completed Surveys Here*. Vadillo, Rojo, Garces, and Checton (2016) conducted a mixed methods research study, which included 65 healthcare professionals and 6 critical care managers at a hospital. The researchers examined the relationship between the adoption of computer technology and the healthcare professionals' perception of the technology's effectiveness in delivering patient care in the critical care unit. The healthcare professionals completed a paper-and-pencil survey, and the critical care managers participated in a focus group. The researchers stored the completed surveys in a locked box as a security measure of participants' information. The research findings revealed a positive relationship between the demographics, training, and the adoption of computer technology. Ababneh and Al-Waqfi conducted a quantitative study, which included 221 senior undergraduate students, to examine potentially inappropriate and discriminatory interview questions. Ababneh and Al-Waqfi found a positive relationship existed between asking potentially inappropriate and discriminatory interview questions and violation of applicants' privacy, which could lead to legal intervention. With an emphasis to secure participants' information because of the sensitive nature of the questions, Ababneh and Al-Waqfi (2016), similar to Vadillo et al., did not collect any identifiable information to assure patients' anonymity. Developing innovative strategies to protect the anonymity of participants might enhance participation in research studies.

Paper-based surveys have the advantage of offering greater anonymity. Assuring anonymity is an important commitment to participants who engage in survey-based

research (Petersen et al., 2015). Thorton et al. (2017) conducted a semiquantitative study, which consisted of 889 ambulatory patients, to evaluate patients' satisfaction levels at various healthcare centers. Thorton et al. used an anonymous, paper survey, which they did not request any medical information or identifiable information to protect their identity of participants. Ward, Clark, Zabriskie, and Morris (2014) questioned the notion of anonymity when using paper-based surveys. In consideration of Ward et al.'s critical concern of anonymity, I did not collect the names of participants. Administering paper-based surveys provided a convenient method to collect data, anonymously and confidentially.

Variables may affect response rates rather than the type of survey. Tella (2015) conducted a quantitative study, which involved 500 library information science researchers and information professionals in seven Nigerian states, to examine the advantages and disadvantages of electronic and paper-and-pencil survey administration. Tella found that paper-based surveys tended to have a higher response rate compared to the administration of electronic surveys because of limited access to technology, time availability, and lack of skills. However, the research findings revealed that electronic surveys received a faster response than a paper-based survey. Grieve and Hayes (2016) conducted a quantitative study, which consisted of 91 employment candidates in Australia, to examine the data collection methods of online, pen-and-paper, and phone administration and accuracy in survey completion. The researchers found no significant difference in response rates between online, paper and pencil, and phone surveys. Nonetheless, Ward et al. (2014) asserted participants' age group might affect response

rates. Researchers using paper-based surveys may have the advantage to access, monitor, and control the progress of the survey (Tella, 2015). Although some participants might prefer other forms of surveys, paper-based surveys do not discriminate based on age and levels of skill or comfort.

Paper-based surveys possess some disadvantages. When comparing paper-based surveys to online surveys, paper-based surveys may have limited content and efficiency (Guo et al., 2016), and incur higher costs to reach larger populations (Tangmanee & Niruttinanon, 2015). Paper-based surveys require costs related to printing, mailing, training, and other administrative costs (Ward et al., 2014). Liu, Zhao, Chau, and Tang (2015) asserted paper-based surveys could not attract the appropriate target population, as well as provide autonomy for participant survey completion. Ruihley and Hardin (2014) argued that online surveys might impose privacy and security risks. Another disadvantage for paper-based surveys involves participants' awareness that an individual will review each paper-based survey, which may lead some participants to complete the survey falsely (Ward et al., 2014). Despite the disadvantages of paper-based surveys, the advantages exceeded those of electronic surveys for this research study. Examining the advantages and disadvantages of data collection techniques enables researchers to secure the best method to collect data.

Cross-sectional and longitudinal research methods use different time spans for data collection. Cross-sectional methods examine a sample population at one time, whereas longitudinal methods examine the sample population at different time intervals (Sedgwick, 2014). Although Gorjidooz and Greenman (2014) defended the cross-

sectional method for its efficiency, cost-savings, and time-saving measures, Jasti and Kodali (2014a) argued that longitudinal methods offer findings that are more conclusive. With limited time and resources, the combination of a cross-sectional method and one-time survey distribution were the optimal selections for this study.

Some social science researchers conduct pilot testing. A pilot test includes a review of the instrument's questions, format, and an opportunity to identify any potential problems or gather recommendations before distribution of the instrument (Kundu & Bairi, 2014). Researchers who conduct may improve the instrument before collecting data (Morrison & Hoover, 2013). For example, Borlund (2016) implemented a pilot-testing activity, which included 67 papers to analyze various phases of a research study to identify weak areas before testing an actual instrument. Hofmeyer, Sheingold, and Taylor (2015) confirmed that pretesting activities helped identify associated problems before implementation. In this study, I selected three standardized instruments featuring the Work & Well-being Survey (UWES-9), JSS, and TIS, which did not require pilot testing.

Data Analysis

The focus of this study examined the relationships between work engagement, job satisfaction, and nurse turnover intention in hospital settings. Thus, examining the relationship between work engagement and job satisfaction may help identify some factors that affect nurses' intent to resign from employment and improve hospitals' financial stability and performance to attain sustainability. Therefore, the research question and hypotheses directing the research study follow.

Research Question

RQ1: Do work engagement and job satisfaction predict nurse turnover intention at hospitals?

Hypotheses

$H_0 1$: Work engagement is not a statistically significant predictor of nurse turnover intention at hospitals.

$H_a 1$: Work engagement is a statistically significant predictor of nurse turnover intention at hospitals.

$H_0 2$: Job satisfaction is not a statistically significant predictor of nurse turnover intention at hospitals.

$H_a 2$: Job satisfaction is a statistically significant predictor of nurse turnover intention at hospitals.

Multiple Linear Regression

Various statistical methods are available to assist researchers in data analysis. For this research study, I employed multiple linear regression to analyze data. Multiple linear regression provides a reliable statistical technique that is used to investigate two or more independent variables and predicts the dependent outcome variable (Aliahmadi, Mozafari, Jafari-eskandari, & Nozari, 2016). Samad, Reaburn, and Ahmed (2015) used multiple linear regression to conduct a study of 281 academics and general staff employed on Central Queensland University's five regional campuses. Samad et al. examined the relationship between the independent variables of strain, social support, and total work hours along with the dependent variable, work-life conflict. Multiple linear

regression is useful when studying large populations and examining relationships between variables; multiple regression served as an appropriate analytical tool for this study. Specifically, I used multiple linear regression to determine if work engagement and job satisfaction predicted nurse turnover intention.

Advantages of multiple linear regression. Multiple linear regression has a unique advantage over other data analysis techniques. Multiple linear regression can predict an outcome for the dependent variable (Kam & Abdul Hamid, 2015). In multiple linear regression, R, R^2, and *adjusted R^2* represent the correlation coefficient, the coefficient determination, and the adjusted $R2$, respectively (Green & Salkind, 2013; Jaseviciene & Jurksaityte, 2014). The R represents the values of variables, and R^2 denotes the statistical strength of the variance between the predictor and dependent variable(s) found in the current sample (Martin & Bridgmon, 2012). The coefficient R^2 is used to evaluate the appropriate fit of variables based on the values of each variable (Amirat, Ziani, & Messadi, 2016). Large R^2 values indicate a strong relationship with prediction adequacy, whereas small values reflect a weak relationship and an inability to make predictions (Wang, Nguyen, & Tuyen, 2014). Thus, the adjusted R^2 regulates the proper fit of the variables to generalize the results of the model to the population (Bakhtiari, Hematian, & Sharifi, 2015). Multiple linear regression also offers an advantage over other techniques by examining the relationship between predictor and dependent variables.

Alternative statistical tests. Other statistical tests did not meet the requirements of this study. Differentiating multiple linear regression from other statistical tests

revealed the appropriateness for this study. For example, a *t*-test distribution compares either the mean of two independent samples (independent *t*-test) or two dependent samples (dependent *t*-test) (Martin & Bridgmon, 2012). Independent *t*-tests provide a comparative assessment of paired samples (Field, 2013). The Mann-Whitney U test provides an alternative to the independent *t*-test because it compares the medians of two groups and investigates the origin of the groups evolving from the same distribution (Hossain & Zahidul Islam, 2015). Analysis of variance (ANOVA) represents another linear statistical model, which is used to compare the statistical differences between three or more independent variables (Field, 2013; H.-Y. Kim, 2014). Further, an analysis of variance F test presented as a suitable choice under valid assumptions to determine the significance between variances of sample sizes that may hinder attaining logical assumptions for the researcher (Parra-Frutos, 2013). When considering quantitative options, I determined that multiple linear regression was appropriate to answer the research questions for this study.

Various statistical tests possess similarities or differences in relationships between variables. Similar to the Mann-Whitney U test, the Kruskal-Wallis test also compares the distributions of multiple groups and expects the groups to share the same frequencies (Field, 2013). Spearman's rank correlation statistic test examines the relationships between variables by rank order (Kirankabes & Arik, 2014). Multiple linear regression has the advantage of examining the correlation between independent variables and a dependent variable (Muzumdar, 2014). Therefore, in comparison to other statistical tests, multiple linear regression supports the preferred statistical analysis technique.

Data cleaning and screening. For this study, I collected data from one survey

that combined the Work & Well-being Survey (UWES-9), the Job Satisfaction Scale, and

the Turnover Intention Scale. After data collection, I screened each response set to

identify missing items to exclud incomplete surveys from the analysis. Data cleaning

involves screening data to identify missing data, prevent errors, and improve the quality

of the research findings (see Osborne, 2013). Vivek, Beatty, Dalela, and Morgan (2014)

surveyed 247 undergraduate students from a southeastern university in the United States.

In screening the online survey data, Vivek et al. eliminated incomplete response sets from

the returned surveys before conducting data analysis. Missing data may significantly

affect conclusive research findings (Dorazio, 2016; Faria, Gomes, Epstein, & White,

2014). Screening data for completeness improves accuracy and minimalizes potential

errors (Dedu, 2014). Data quality can potentially weaken or strengthen the validity of the

research study.

Implementing screening techniques helps to improve data quality. Implementing

data screening techniques before, during, or after distributing the survey can reduce low-

quality data and enhance the accuracy of the research findings (DeSimone, Harms, &

DeSimone, 2015). In support of Dorazio, and Dedu, Cai and Zhu (2015) asserted that

data cleaning might provide improvements in data quality. For this study, I distributed

paper surveys. In using paper surveys, DeSimone et al. (2015) recommended that

researchers' time participants while completing the surveys to learn participants' survey

completion behavior. For example, DeSimone et al. recognized some participants might

finish quickly, which might indicate inaccuracy in completing the survey. Also,

researchers should inspect surveys after for completeness. Implementing screening techniques may help researchers improve the quality of data to employ accurate and useful results.

Assumptions

Multiple linear regression includes several assumptions preceding the data analysis process. Assumptions are derived from theoretical underpinnings to test the relationships between variables (Nitu-Antonie & Feder, 2015). Some of the most common assumptions include linearity, multicollinearity, outliers, independence, and normality, homoscedasticity (Bachleda, & Bennani, 2016). Researchers use various assumptions to evaluate data and identify potential violations before the data analysis process.

Data analysis employs assumptions to examine the relationship between variables. Linearity assumes a linear relationship between the dependent and independent variables (Martin & Bridgmon, 2012). AlAnazi, Mohd-Shamsudin, and Johari (2016) defended the importance of validating a linear relationship so that the researcher could avoid misinterpretations about the relationships between variables. The use of scatterplots could confirm whether a linear relationship exists between independent and dependent variables (Ahmad, Nawawi, & Salin, 2016). Multicollinearity reveals a highly correlated relationship between two or more predictors (Farooq, 2016; Kassim, Anwar, Arokiasamy, Md Isa, & Ping, 2017). Scatterplot diagrams illustrate the relationships between independent and dependent variables (Schlechter, Thompson, & Bussin, 2015). Scatterplots also determine whether variables meet or violate assumptions (Hall, 2015).

There exist numerous assumptions available to the researcher to analyze the relationship between variables.

Research findings can be affected outside of the control of the researcher. Outliers depict abnormal values (Williams, Gómez Grajales, & Kurkiewicz, 2013). Field (2013) asserted that outliers could affect the value of estimates. Jackson and Jackson (2015) described an outlier as a value one standard deviation above or below the mean. In the event the survey had an outlier, I would contact my chair to discuss how to handle the participant's survey. If any other outliers appeared in the raw data, I would handle each situation on a case-by-case basis, after discussion with my chair. Seeking the expertise of an expert methodologist provides an opportunity for less experienced researchers to address statistical-related issues. Inappropriate handling of outliers could skew the results (Jackson & Jackson, 2015).

Another issue commonly noticed in a quantitative study is an assumption of independence, which means an error may reflect an independent nature of no relation to one another. Normality assumes a normal distribution of data (Siddiqi, 2014). However, Field (2013) noted sampling distribution requires normal distribution. Homoscedasticity provides another assumption for data analysis and proposes the existence of values between the variance of residuals consistent between independent and dependent variables (Field, 2013). An equal or constant variance represents homoscedasticity (Kassim et al., 2017). Confirmation of homoscedasticity assumptions can be shown on a scatterplot diagram (AlAnazi et al., 2016). Researchers use various assumptions to

examine the relationships between variables; with each examination, a potential for violation of assumptions exists.

Violations of assumptions. Violation of assumptions requires corrective intervention. Violation of assumption occurs when data do not meet or fail the assumption requirements. Bootstrapping represents a direct method to overcome failure (Field, 2013). Bootstrapping represents a resampling technique (Font, 2016) Bootstrapping does not rely on the assumption of a normally distributed sample (Cohen & Abedallah, 2015; Shurden, Santandreu, & Shurden, 2016); however, such assumptions may require caution (Sufahani & Ahmad, 2012). Despite the noted challenges, bootstrapping provides a more precise technique as a corrective strategy when violations of assumptions exist. Consequently, any violation of assumptions will result in the nullification of the validity of confidence levels and significance tests (Field, 2013). Hence, the appropriate selection of statistical techniques can improve the conclusive findings of the research study.

Interpreting inferential results. Quantitative researchers use both descriptive and inferential statistics to analyze data. Descriptive statistics employ measures such as medians, modes, variances, and standard deviations to summarize the dispersion of data (M. Malik et al., 2015). Inferential statistics use statistical tests such as the *t*-test and ANOVA to test the relationships between the hypotheses to make conclusions about the population (Zhang, Zhao, & Wang, 2016). I used Pearson's correlation to determine the relationships between work engagement, job satisfaction, and nurse turnover. Pearson's correlation measures the strength of independent and dependent variables (Rezghi

Rostami, Valmohammadi, & Yousefpoor, 2014). Cohen (1988) calculated the strength of the relationships between variables, noting values closer to zero represented a weak effect on the relationship between variables, while values closer to one represented a stronger relationship between variables. Also, I used scatterplots to assess linear relationships between variables. Scatterplots visually depict linear relationships and outliers (Oro, Neto, Mafioleti, Garcia, Neumann, & Júnior, 2016). However, Bezzina and Saunders (2014) noted that the presence of outliers and assumed correlations might distort conclusions. Descriptive statistics were used to identify the characteristics (i.e., age, gender, years of experience, and other demographic information) of the participants, as well as measure trends of data.

Excel and Statistical Package Social Sciences

For this study, I used IBM's Statistical Package Social Science (SPSS) version 24 to conduct the data analysis. I transferred data from an Excel spreadsheet into SPSS to begin processing for analysis. SPSS is a user-friendly statistical tool (Secchi, 2015; Ward et al., 2014) that analyzes results from descriptive statistics (Nzuza & Lekhanya, 2014). Reuben, Chiba, and Scheepers (2017) explained that descriptive statistics included the mean, median, mode, standard deviation, skewness, and kurtosis. SPSS provides an advantage with the abovementioned statistics (Reuben et al., 2017); SPSS is a powerful software package to conduct data analysis and allows the researcher to determine the rejection or acceptance of the null hypotheses.

Study Validity

Conducting research involves different dimensions of validity. Study validity involves qualifying research instruments based on scientific standards (Schapp & Kekana, 2016). Attaining validity may help to determine the proper measurement of the instrument (Rahman, Osmangani, Daud, Chowdhury, & Hassan, 2015), as well as the accuracy of the instrument and data measured (M. S. Sharma & Halvadia, 2015). Field (2013) asserted validity does not solely determine the accuracy of an instrument. To facilitate the accuracy of an instrument, include dimensions such as content validity, criterion validity, and construct validity (Campbell, Parks, & Wells, 2015). Content validity includes an evaluation of an instrument's items, as well as the entire instrument (Field, 2013). Researchers use criterion validity to determine whether the instrument fulfills certain measurement criteria (Field, 2013). Quantitative researchers employ criterion validity by conducting a comparative analysis of established instruments with newly designed instruments (Jasti & Kodali, 2014b). Construct validity involves the measurement of the relationship between variables from a theoretical perspective to determine the accuracy of an instrument (Jasti & Kodali, 2014b). Validity establishes the framework for existing and future research studies to ensure the use of valid instruments.

Internal Validity

Internal validity measures the outcomes of experimental and quasi-experimental designs. Quantitative researchers can assess internal validity by examining the causal relationships between variables and eliminating threats affecting the outcome (Clinton, 2016; Martin & Bridgmon, 2012). This research study incorporated nonexperimental and

correlational study designs. Nonexperimental designs involved examining the

relationship between variables without manipulations making predictions about variables

(Reio, 2016), whereas experimental designs examined causal relationships between

variables with manipulation (Field, 2013). Because this study used a nonexperimental,

correlational design, this study did not relate to internal validity. Although

nonexperimental designs do not address threats to internal validity, they do incur threats

to the validity of statistical conclusions.

Threats to Validity

For quantitative researchers, testing hypotheses may involve threats to the validity

of interpretation. Statistical conclusion validity evaluates the accuracy of the null

hypothesis, to avoid Type I and II errors, based on the relationship between variables

(Baujard, 2015; Dobbie & Negus, 2013). I selected a statistical power $=>0.90$ to reduce

the probability of a Type II error and an alpha error probability of $\alpha = 0.05$ to reduce the

risk potential of a Type I error. Annamdevula and Bellamkonda (2016) reported that

Cronbach alpha values greater than 0.95 imply bias. A Cronbach alpha value, greater than

0.95, may indicate similarities relating to the types of questions or the suitability of test

length (Tavakol & Dennick, 2011). Type I error occurs when a quantitative researcher

rejects a valid null hypothesis; conversely, a Type II error occurs when the quantitative

researcher accepts an invalid, null hypothesis (Bezzina & Saunders, 2014; Sargent,

2015). Type I and Type II errors provide researchers with insight to identify threats to

validity.

Different issues in a research study can cause threats to validity. Cohen (1988) described the variables of power to include (a) sample size, (b) significance level, (c) effect size, and (d) level of power. Small sample sizes fail to detect problems (Perneger, Courvoisier, Hudelson, & Gayet-Ageron, 2015). Increasing the sample size serves as the ideal method to increase statistical power (Dobbie & Negus, 2013). However, larger populations incur higher costs (Tangmanee & Niruttinanon, 2015). Dobbie and Negus (2013) and Dolado, Otero, and Harman (2014) asserted that large sample sizes reduce Type II errors. Type II errors occur when researchers fail to reject the null hypotheses (Taper & Ponciano, 2016). Golden, Henley, White, and Kashner (2016) proposed that as the sample size increases, the Type II error becomes smaller. Sufficient power requires a minimum level of =0.80 or higher (Molenaar, 2015). Bezzina and Saunders (2014) asserted that, as the alpha error probability decreases, the statistical power decreases, as well. Type I and II errors have the potential to affect research findings, and researchers need to minimize or eliminate threats that can interfere with accurate, conclusive findings.

Reliability of the Instrument

Attaining reliability establishes the quality of an instrument. Field (2013) defined reliability as the accuracy of an instrument's ability to produce the same results, consistently and validity indicating an actual measurement of the instrument. In this research study, I used reliable and valid instruments. Boscart, Pringle, Peter, Wynn, and McGilton (2016) emphasized the significance of using a valid and reliable instrument to achieve accurate measurement of variables. Unreliable and invalid instrument reflect

poor measurement quality (McCutcheon et al., 2016), which could produce inaccurate results. I computed Cronbach's alpha to identify the reliability of the survey instruments. A Cronbach's alpha coefficient measurement of 0.70 reflects the acceptable reliability of the instrument (Rossoni, Engelbert, & Bellegard, 2016), whereas above 0.80 reflects good reliability (Wagner et al., 2015). SPSS incorporates the use of the Analyze/Scale/Reliability Analysis to compute Cronbach's alpha, which determines the reliability of the instrument (Frankforter & Guidry, 2015). To minimize threats to statistical conclusion validity, researchers must ensure content validity, use valid instruments, and include complete and appropriate items in the instrument (Rosha & Lobanova, 2014). The required steps for ensuring content validity play a crucial role in the development of an instrument (Aravamudhan & Krishnaveni, 2015). Failing to ensure content validity may produce inaccurate results (Ali, Tretiakov, & Whiddett, 2014). Also, each instrument requires a computation of the Cronbach's alpha to establish reliability (Aigbogun, Ghazali, & Razali, 2017). For this research study, each instrument required a Cronbach alpha coefficient rating of 0.70 to .90 to determine appropriateness.

Data Assumptions

Statistical tests require different assumptions related to the outcome of the research findings. Before data analysis, conducting certain statistical tests may help to determine whether data distribution meets the required assumptions of hypothesis testing (Trajkovski, 2016). Field (2013) noted four basic assumptions: (a) linearity between independent and dependent variables, (b) normal distribution of variables, (c) homoscedasticity of variance, and (d) independence of residuals. Linearity displays data

in a linear form (AlAnazi et al., 2016); other data will display as outliers (Wu, Li, &

Chang, 2015). Outliers refer to values different from the other values displayed (Field,

2013). Scatterplots provide a graphical display of values that can identify the relationship

and strength between two variables (Field, 2013). Violation of assumptions will result in

invalid measures and may lead to misinterpretation of the relationship between variables

(Vargha, Bergman, & Delaney, 2013). Hence, addressing data assumptions increases the

conclusions of the research.

Another assumption assumes that data will have a normal distribution. The

assumption implies that data display a normal distribution, yet data may not display a

normal distribution (Field, 2013). Trajkovski (2016) asserted that this assumption reflects

a normal distribution between the mean and standard deviation of the sample population.

Histograms provide a graphical display to view the distribution of frequencies as well as

the intervals of scores, which may represent positive and negative values (Martin &

Bridgmon, 2012). Bootstrapping refers to a resampling technique that makes statistical

inferences when violated assumptions occur (Malesios & Psarakis, 2014). Researchers

can incorporate bootstrapping to correct the violation of the assumption (Field, 2013).

Moreover, bootstrapping creates thousands of samples from random samplings that

reflect a 95% confidence interval (Preacher & Hayes, 2008). Although normal

distributions present the optimal assumptions, other distribution models can provide

alternative methods of illustrating data, to avoid violation of assumptions.

Homoscedasticity and weighted least squares are two distinct methods to address

the violation of assumptions. Homoscedasticity occurs when the variance of errors

represents consistency for the predicted dependent variable and all predicted scores

(Martin & Bridgmon, 2012). Therefore, determining the appropriate method to address

the potential violation of assumptions depends on the variance. Weighted least squares

serve as an alternative test used to estimate the variances of each variable (Field, 2013).

The Durbin-Watson technique tests the violation of assumptions for the correlation

between errors (Hashim, Nawawi, & Salin, 2014). The last assumption stipulates that the

independence of residuals does not reflect serial correlation (Almeida, Pereira, &

Tavares, 2015). Using a scatterplot display can graphically illustrate the relationship

between variables when violations of assumptions occur (Kovacs et al., 2016).

Identifying violations of assumptions and incorporating statistical tests can assist

quantitative researchers to validate the strength of their research findings.

Sample Size

Sample size influences the accuracy of research findings. The adequate sample

size is a crucial determinant of generalization (Romeo & Lee, 2015). Furthermore,

sample size can influence confidence levels and sampling errors (Dolado et al., 2014).

Small sample size may diminish validity and weaken conclusive findings, thereby posing

a significant threat to statistical power. Conversely, larger sample sizes can eliminate the

assumption that data display a normal distribution (Pfahler & Vukovinsky, 2014).

Bezzina and Saunders (2014) argued, however, that large and small sample sizes may

negatively affect statistical power. To address this issue, G*Power 3.1, a power analysis

program, assists in calculating the appropriate sample size to achieve optimal results

(Faul et al., 2009). As computed, using G*Power 3.1, this study required a minimum

sample size of 68 for data analysis (Faul et al., 2009). Therefore, the appropriate sample size is a crucial aspect of the research process to reduce errors and demonstrate validity.

Probability and nonprobability samplings have different effects on external validity. External validity involves generalizing the findings of a study with an application to other sectors (Yin, 2014). Engelbrecht, Wolmarans, and Mahembe (2017) conducted a quantitative study, which included 224 employees in South Africa, to examine the relationship between leader effectiveness, ethical climate, and ethical leadership. The researchers found a positive relationship existed between leader effectiveness, ethical climate, and leader effectiveness. However, Engelbrecht et al. revealed the use of nonprobability sampling or convenience sampling did not provide access to a sample that is a complete representation of the desired population. Further, quantitative researchers may be unable to achieve an optimal response rate, which could interfere with external validity (Rowley, 2014). Limited access to large populations inhibits generalization and predictions (Nørreklit, Nørreklit, & Mitchell, F. (2016). Conversely, probability sampling or random sampling provides an opportunity to generalize to the larger population from a representative sample thereby enhancing external validity (Martin & Bridgmon, 2012). Although nonprobability sampling does not provide access to the larger population, nonprobability sampling does provide an advantage of convenience for data collection.

Transition and Summary

Section 2 provided a comprehensive explanation of the research procedures for a quantitative correlational study on the relationship between work engagement, job

satisfaction, and nurse turnover intention in hospitals. The purpose statement included an overview of the population and geographical location as well as the social implications of social change. Section 2 comprised of a description of my role as the researcher, the process of recruiting prospective participants, the inclusion criteria for participation, and the compliance standards for conducting ethical research when involving human participants and methods to address ethical dilemmas.

The population and sampling section included a discussion of the process of nonprobability sampling and the sample representation of the larger population. The selected population comprised of registered nurses employed in hospitals located in New York. Section 2 expanded on the selected research method and design, as well as the data collection technique proposed. This section included a discussion of the reliability and validity of the instruments. SPSS Version 24 serves as the tool to analyze data collected, using multiple linear regressions to correlate the relationship between the independent variables of work engagement and job satisfaction and the dependent variable of nurse turnover intention. The result of the statistical analysis will determine whether I reject or fail to reject the null hypotheses. Finally, I discussed the effects of external validity and the approaches to minimize threats to the validity of statistical findings.

Section 3 will provide an interpretation and reflection on data used in the statistical techniques and illustrations to reveal conclusive findings. Also, in section 3, I will discuss the findings of business practices, as well as the implications for social change. After identifying and analyzing the findings of the research, I propose recommendations for future action and further research.

Section 3: Application to Professional Practice and Implications for Change

Section 3 will provide an interpretation of and a reflection on the data used in the statistical techniques and illustrations to reveal conclusive findings. Also, in Section 3, I will discuss the findings of business practices, as well as the implications for social change. After identifying and analyzing the findings, I propose recommendations for future action and further research.

Introduction

The purpose of this quantitative, correlational study was to examine the relationships between work engagement, job satisfaction, and nurse turnover intention in hospitals. The independent variables were work engagement and job satisfaction, and the dependent variable was nurse turnover intention. I used a 48-question, anonymous, paper-based survey to collect data. In evaluating the evidence from the data of 155 registered nurses employed in hospitals, the findings were analyzed using multiple regression.

Presentation of the Findings

In this subsection, I include the findings of the statistical tests and summaries of the statistical assumptions. I transferred the data into an Excel spreadsheet and imported the data into SPSS to conduct a multiple linear regression test. The multiple linear regression model produced significant findings $F(2, 152) = 30.60, p < .001. R^2 = .287$. Multiple linear regression tests can determine statistical relationships between variables (Aliahmadi et al., 2016; Martin & Bridgmon, 2012). In this study, the predictor variables were work engagement and job satisfaction. The dependent variable was turnover

intention. The statistical tests that tested the hypotheses were frequency counts, means, and standard deviations.

Descriptive Results

Data collection ran from March 15, 2018, through May 18, 2018, from conducting numerous in-person presentations at two hospitals, located in New York State. The number of surveys totaled 173. I discarded 18 surveys because of missing data, which resulted in a total count of 155 surveys for data analysis. I transferred the numerical values into an Excel spreadsheet and then imported the data into SPSS for analysis.

Demographic Frequencies and Percentages

Table 1 displays the frequency and percentages from the survey results. The primary sample consisted of 93.5% females, and about two-thirds of the sample (69.7%), were Caucasian. Years of experience ranged from 2 to 45 years ($M = 18.38$, $SD = 13.48$). Years of tenure ranged from 2 to 40 years ($M = 10.31$, $SD = 9.67$). The ages of the respondents ranged from 23 to 69 years of age ($M = 43.95$, $SD = 12.69$).

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Table 1

Frequency Counts for Gender and Race/Ethnicity

Variable	Category	*N*	%
Gender			
	Female	145	93.5
	Male	10	6.5
Race/Ethnicity			
	African American	23	14.8
	Caucasian	108	69.7
	Hispanic	10	6.6
	Asian/Pacific Islander	9	5.7
	Other	5	3.2
Experience [a]			
	2-9 years	56	36.1
	10-19 years	34	21.9
	20-29 years	24	15.5
	30-45 years	41	26.5
Tenure [b]			
	2-4 years	96	61.9
	5-9 years	32	20.6
	10-19 years	17	11.0
	20-40 years	10	6.5
Age [c]			
	23-29 years	21	13.5
	30-39 years	43	27.7
	40-49 years	33	21.3
	50-69 years	58	37.5

Note. $N = 155$.
[a] Experience: $M = 18.38$, $SD = 13.48$.
[b] Tenure: $M = 10.31$, $SD = 9.67$.
[c] Age: $M = 43.95$, $SD = 12.69$.

Descriptive Statistics for Independent Variables

Table 2 displays the descriptive statistics, specifically the mean and standard deviation, for each of the study variables. The independent study variables included work engagement and job satisfaction. Work engagement consisted of three subscales:

dedication, absorption, and vigor— and job satisfaction consisted of nine subscales—pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of the work, and communication. The dependent study variable was turnover intention. Based on a six-point, Likert-type scale, the mean score for work engagement was 4.23, indicating that the participants showed an average level for work engagement. Schaufeli and Bakker's (2004a) description of how to interpret scores in the Work & Well-being Survey (UWES-9) informed my interpretation. The mean score for job satisfaction was 4.01, again using a six-point, Likert-type scale, indicating that more of the participants were satisfied than dissatisfied with their employment. Following Spector's (1994) scoring of the JSS, the mean score for turnover intention was 2.08, this time using a five-point Likert-type scale, indicating that more participants had a low level of turnover than those that were considering leaving their organization. Following Yin-Fah et al.'s (2010) interpretation of high and low scores turnover intention scores, the bootstrapped 95% CI (M) represented the range for the mean of each of the study variables.

Table 2

Descriptive Statistics for Study Variables

Variable	*M*	*SD*	Bootstrapped 95% CI (*M*)
Work Engagement[a]	4.23	0.87	[4.09, 4.35]
Dedication	4.66	0.95	[4.51, 4.80]
Absorption	4.13	0.97	[3.98, 4.27]
Vigor	3.92	1.07	[3.74, 4.07]
Job Satisfaction[b]	4.01	0.58	[3.92, 4.10]
Pay	4.04	1.02	[3.89, 4.20]
Promotion	3.4	1.02	[3.24, 3.55]
Supervision	4.66	1.08	[4.48, 4.82]
Fringe Benefits	3.81	0.94	[3.67, 3.97]
Contingent Rewards	3.76	1.1	[3.59, 3.93]
Operating Conditions	3.06	0.83	[2.92, 3.19]
Coworkers	4.54	0.87	[4.40, 4.67]
Nature of Work	5	0.78	[4.88, 5.11]
Communication	4.08	0.97	[3.92, 4.22]
Turnover Intention[c]	2.08	1.05	[1.91, 2.26]

Note. *N* = 155.

[a] The Work & Well-being Survey (UWES-9): 6-point Likert-type ordinal scale ranging from 0 = (never) to 6 = (always)

[b] Job Satisfaction Scale: 6-point Likert-type ordinal scale ranging from 1 (disagreed very much) to 6 = (agreed very much)

[c] Turnover Intention Scale: 5-point Likert-type ordinal scale ranging from 1 (strongly disagree) to 5 strongly agree)

Reliability Analysis

The study included three scales: The Work & Well-being Survey (UWES-9), the JSS, and the TIS. Each scale included items relating to its specific focus. For work engagement, participants answered nine questions, using the UWES-9 relating to their level of work engagement in a hospital setting, using a six-point Likert-type scale. A rating of 0 indicated "never," and a rating of 6 indicated "always," relating to the level of work engagement. For job satisfaction, participants answered 36 items using the JSS relating to their level of job satisfaction in a hospital setting, using a six-point Likert-type scale. A rating of 1 indicated participants who "disagreed very much" and a rating of 6 indicated that participants "agreed very much" with the relevant items. Thirteen items required reverse scoring, where 1 indicated participants who "agreed very much" and 6 indicated that participants "disagreed very much." For turnover intention, participants answered three items using the TIS relating to turnover intention in a hospital setting using a five-point Likert-type scale. A rating of 1 indicated that participants "strongly disagreed" and a rating of 5 indicated that participants "strongly agreed" with the relevant items.

Each instrument required an acceptable Cronbach's alpha coefficient for internal reliability to meet reliability requirements. Cronbach's alpha is a measure of internal consistency (Borah & Malakar, 2015), test-retest measurements, and an instrument's reliability (Riva et al., 2015), which confirms the validity and the reliability of an instrument. A Cronbach's alpha coefficient measurement of 0.70 indicates acceptable reliability for the instrument (Rossoni et al., 2016), whereas a score above 0.80 indicates

good reliability (Wagner et al., 2015). As Table 3 shows, all three coefficients displayed

acceptable levels of internal reliability ($\alpha > .80$) (Field, 2013).

Table 3

Reliability Table for Work Engagement, Job Satisfaction, and Turnover Intention

Scale	Number of Items	A
Work Engagement	9	0.89
Dedication	3	0.84
Absorption	3	0.85
Vigor	3	0.65
Job Satisfaction	36	0.87
Pay	4	0.71
Promotion	4	0.68
Supervision	4	0.6
Fringe Benefits	4	0.61
Contingent Rewards	4	0.73
Operating Conditions	4	0.44
Coworkers	4	0.55
Nature of Work	4	0.63
Communication	4	0.56
Turnover Intention	3	0.86

Note. N = 155.

Summary Statistics

      Table 4 displays the descriptive statistics for the three summated scale scores. The

observations for work engagement had an average of 4.23 (SD = .87, Min = 2.22, Max =

6.00). The observations for job satisfaction had an average of 4.01 (SD = .58, Min = 2.70,

Max = 5.48). The observations for turnover intention had an average of 2.08 (SD = 1.05,

Min = 1.00, Max = 5.00).

Table 4

Descritive Statistics for Work Engagement, Job Satisfaction, and Turnover Intention

Scale	Number of Items	*M*	*SD*	Min	Max
Work Engagement	9	4.23	0.87	2.22	6.00
Job Satisfaction	36	4.01	0.58	2.70	5.48
Turnover Intention	3	2.08	1.05	1.00	5.00

Note. N = 155.

Inferential Analyses

Tests of Assumptions

      Before answering the research question, I used several statistical methods to test

the statistical assumptions. These tests included identifying possible univariate and

multivariate outliers, normality for the three scale scores, linearity between the

independent variables and the dependent variable, independence of observations,

multicollinearity, independence of residuals, and homoscedasticity. As an additional

method, I employed bootstrapping using 1,000 samples to minimize the possible

influence of any violations of the statistical assumptions. With that, I used bootstrapping

95% confidence intervals as necessary to enhance the accuracy of the interpretation

further (de Crom & Rothmann, 2018).

Outliers. I measured the presence of univariate outliers. Figure 3 displays the

boxplot for the work engagement scale scores. I did not find any univariate outliers. To

estimate the possible presence of multivariate outliers, I calculated Mahalanobis distance

statistics. Mahalanobis distance measures the distance between the means of the

independent variables (Field, 2013). In this study, I found no multivariate outliers.

Therefore, the data met the assumption.
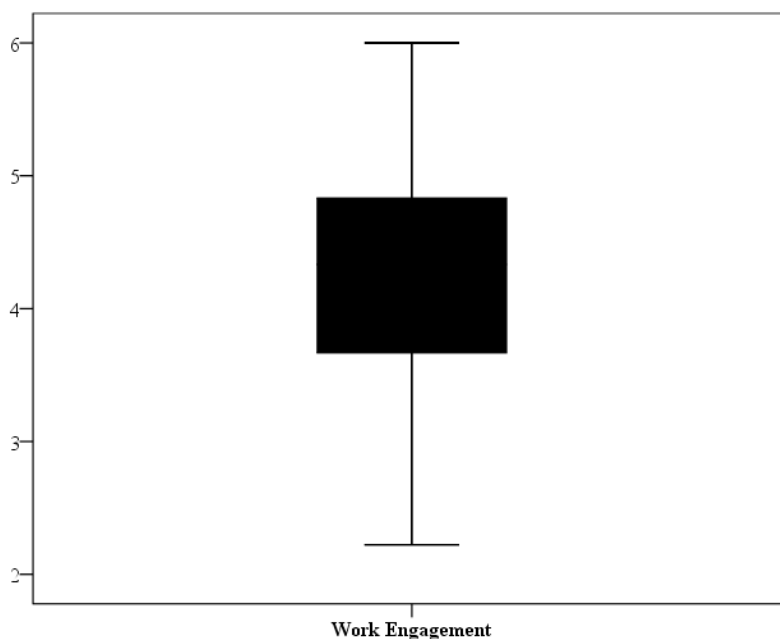
Figure 3. Boxplot for work engagement.

Normality. Before conducting statistical tests, researchers must inspect the data.

To meet the assumptions of normality and linearity, a linear distribution of data points is

necessary (Chatterjee & Hadi, 2012). With a sample of $N = 155$, the general linear model

can range from strong to moderate violations of normality. Inspection of the boxplot,

displayed in Figure 3, found the top and bottom whiskers to be of equal distance from the

box. I created a frequency histogram (see Figure 4) to determine the distribution of data.

Also, Figure 4 frequency histogram represents a bell curve, which is overly peaked, in the

middle of the distribution. With both outcomes, it would suggest that the data met

normality.
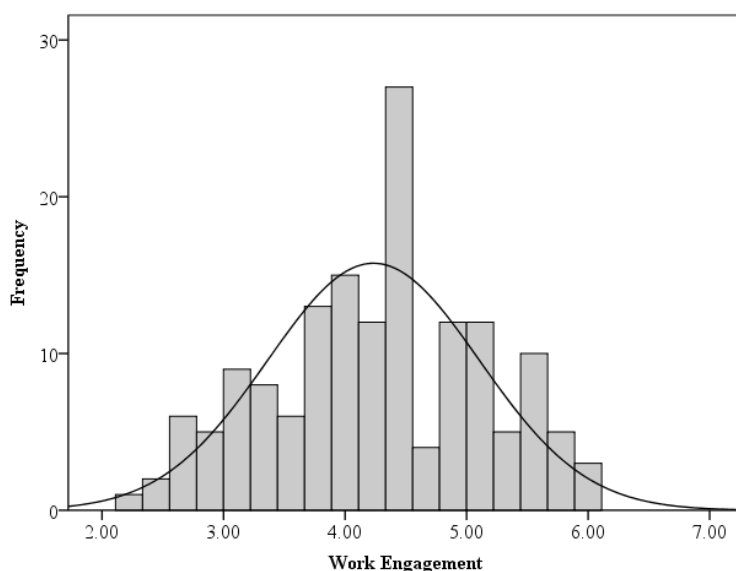
Figure 4. Frequency histogram for work engagement.

Linearity. To examine the extent of linearity between work engagement and the

dependent variable of turnover intention, I created a bivariate scatterplot (Figure 5). Upon

visual inspection of the scatterplot there is no indication of a curvilinear relationship,

which indicates that the data met the assumption of linearity.
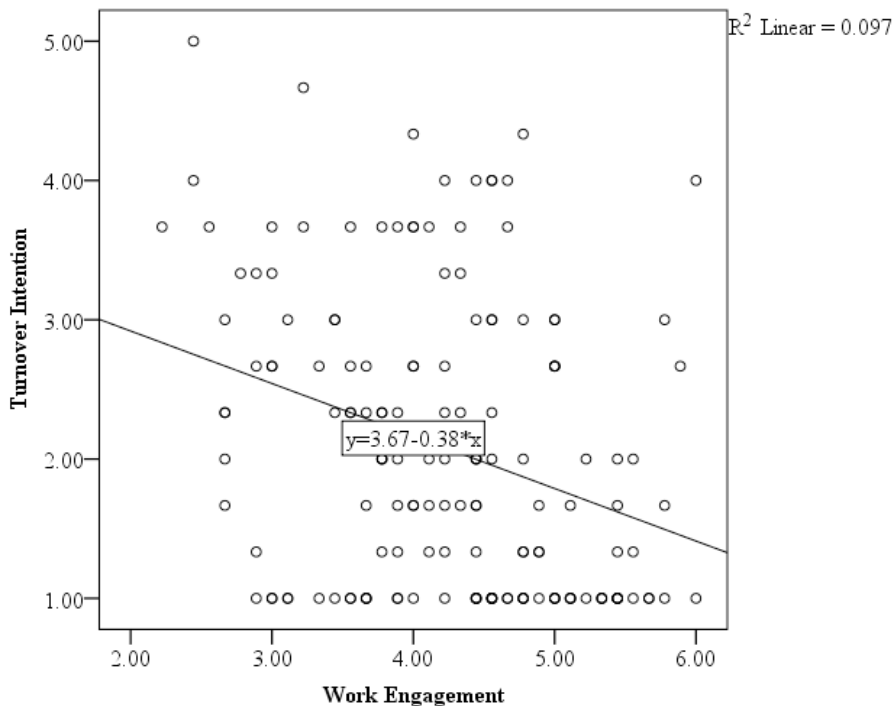
Figure 5. Scatterplot of work engagement with turnover intention.

Independence of observations. The data met the independence of observations

assumption in two ways. First, I designed the study to have each of the 155 nurses

complete the survey only once to avoid multiple survey submissions and measurements

by the same person. Having a select group of participants involved in the study ensured

independent participation (Zientek, Nimon, & Hammack-Brown, 2016). For the second

method, I employed the Durbin-Watson statistic test. Through the Durbin-Watson

statistic test, researchers can examine the sequences relating to the correlations between

the residuals (Field, 2013). A value of more than 2 indicates a negative relationship.

Therefore, the Durbin-Watson statistic (2.08) was acceptable (see Table 7).

Multicollinearity. In statistics, methods exist to detect multicollinearity.

Researchers use multicollinearity to test the correlation between two or more independent

variables (Farooq, 2016). I addressed multicollinearity using the Pearson correlation and the variance inflation factor (VIF). The Pearson correlation between job satisfaction and work engagement was significant ($r = .40, p < .001$). The VIF identifies the linear relationship between the independent variables (Field, 2013). Cohen (1988) provided guidelines for interpreting the strength of linear correlations. Based on Cohen's criteria, the relationship between variables indicated a moderate strength. About these results, the VIF was acceptable at (1.38) for work engagement, (1.21) for job satisfaction, and the data met the assumption of the lack of multicollinearity (Table 5).

Table 5

Collinearity Statistics

Variable	Tolerance	VIF
Work Engagement	0.72	1.38
Job Satisfaction	0.82	1.21
Age	0.20	5.02
Years of Experience	0.19	5.33
Tenure	0.59	1.69

Table 6 shows that the untransformed original turnover intention score has a significant negative correlation with job satisfaction ($r = -.52, p < .001$). There were similar correlation coefficients between job satisfaction and each of the three transformed turnover intention scores. There were similar correlation coefficients between work engagement and each of the three transformed turnover intention scores. Given the

similarity of the Pearson correlation coefficients between each of the independent

variables and the four versions of turnover intention, I decided to use the untransformed

original turnover intention score, which could simplify the interpretive process. However,

I also incorporated bootstrapping, which constructed the use of 1,000 samples, to reduce

the likelihood of wrong statistical conclusions (de Crom & Rothmann, 2018). I examined

the possible influence of the nonnormal distribution on turnover intention. Table 6

displays the Pearson correlations for work engagement with three statistical

transformations of turnover intention. Table 6 also displays the Pearson correlations for

job satisfaction with three statistical transformations of turnover intention. The data met

the assumption fully.

Table 6

Pearson Correlations for Job Satisfaction with Various Transformations of Turnover Intention

Turnover		Job Satisfaction			Work Engagement
Intention	*R*	Bootstrapped 95% CI (*r*)	*r*	Bootstrapped 95% CI (*r*)
Untransformed Original Score	-.52 *	[-.63, -.41]	-.31 *	[-.46, -.15]
Square Root Transformation	-.51 *	[-.63, -.40]	-.32 *	[-.47, -.16]
Log Transformation	-.50 *	[-.62, -.38]	-.32 *	[-.47, -.16]
Inverse Transformation	-.46 *	[-.33, -.58]	-.31 *	[-.15, -.46]

Note. $N = 155$. * $p < .001$

Outliers. I looked for the presence of univariate outliers. Figure 6 displays the

boxplot for job satisfaction scale scores. To measure the possible presence of multivariate

outliers, I calculated the Mahalanobis distance statistics. I found no multivariate outliers.

Therefore, the data met the assumption.
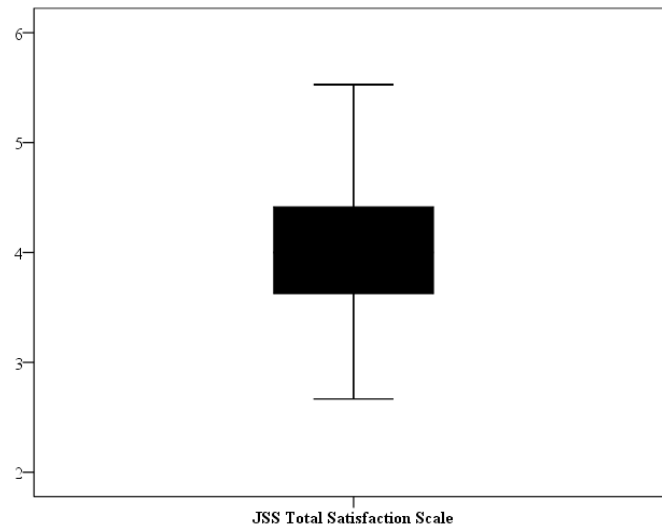
Figure 6. Boxplot for job satisfaction.

Normality. Job satisfaction represents the second variable to inspect related to

normality. To address normality for job satisfaction variables, I created a frequency

histogram (Figure 7). From my inspection, I found acceptable levels of normality for job
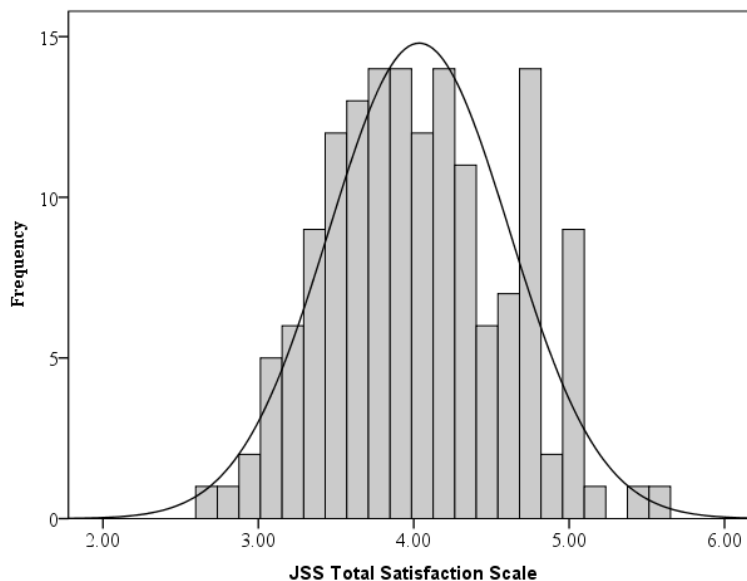
satisfaction.

Figure 7. Frequency histograms for job satisfaction.

Linearity. To examine the extent of linearity between job satisfaction and the dependent variable of turnover intention, I created a bivariate scatterplot (Figure 8). The scatterplot for job satisfaction with turnover intention showed a significant negative correlation between the two variables (*r* = -.52, *p* < *.001*). Based on the inspection of the data, the data met the assumption.
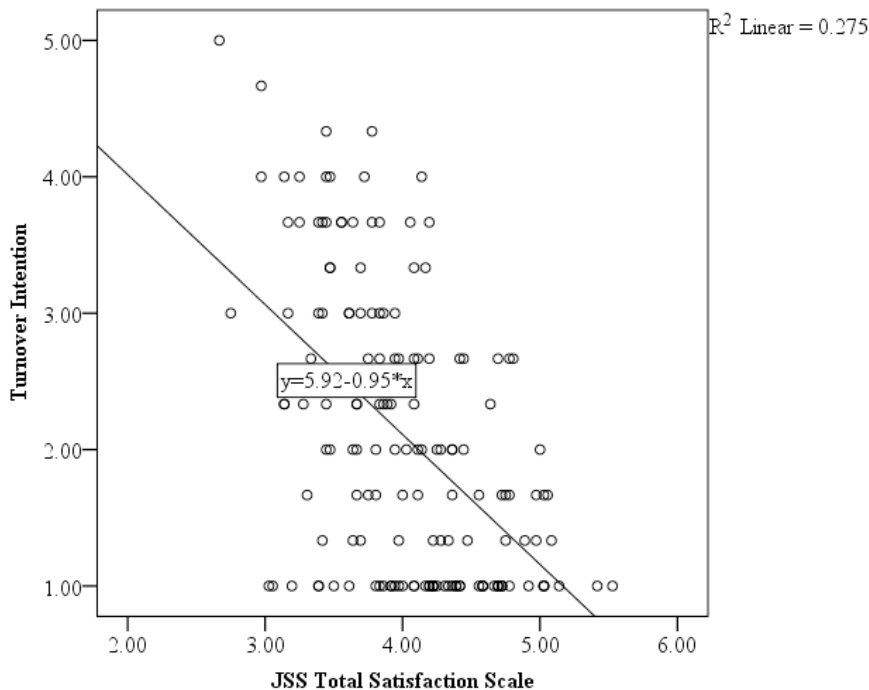
Figure 8. Scatterplot of job satisfaction with turnover intention.

Independence of observations. Once again, the data met the independence of observations assumption in two ways. First, I designed the study to require nurses to complete the survey once, to prevent multiple survey submission and measurements, from the same person. Second, the Durbin Watson statistic test (2.08) again indicated an acceptable measurement (Table 7).

Outliers. I looked for the presence of univariate outliers. Figure 9 displays the boxplot for the turnover intention scale scores. I found no univariate outliers. To measure the possible presence of multivariate outliers, I calculated the Mahalanobis distance statistics. I found no multivariate outliers. Therefore, the data met the assumption.
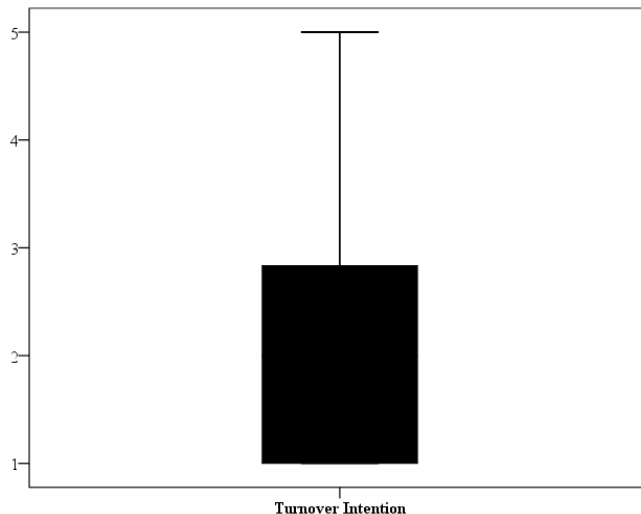
Figure 9. Boxplot for turnover intention.

Normality. To address normality for the turnover intention variable, I created a frequency histogram (Figure 10). The frequency histogram for turnover intention had a pronounced positive skew. Specifically, 50 participants (32.3%) had the lowest possible turnover intention score, meaning that these participants did not have significant intention to leave their hospital at the time of data collection.
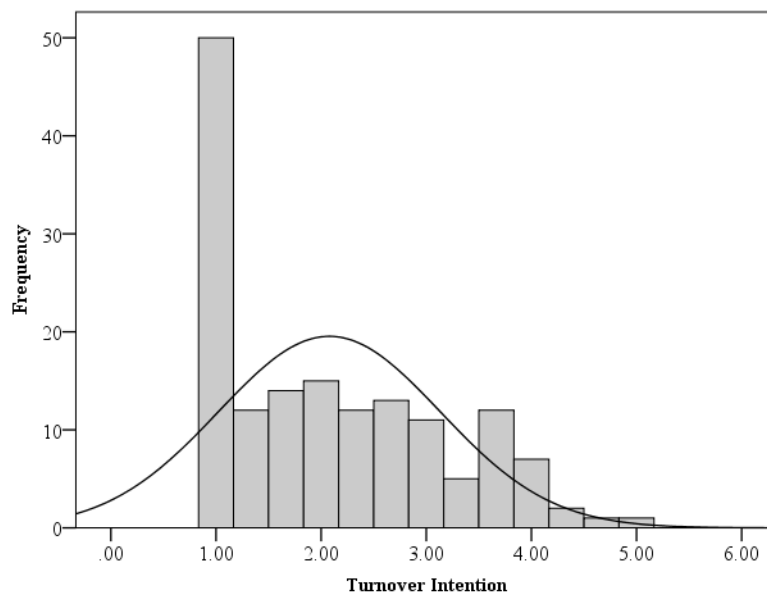
Figure 10. Frequency histogram for turnover intention.

Independence of residuals. I checked the assumption of independence of residuals in two ways (Figures 11 & 12). Figure 11 is a normal probability P-P plot of the regression standardized residuals. I found that most of the residuals cluster near the plot line. Belás and Gabcová (2016) reported that the assumption of independence of residuals meets the criteria when standard residuals were evenly dispersed. In Figure 12, the frequency histogram of the standardized residuals approximated a normal curve with none of the standardized residuals having a *z* score of ± 3.00. Therefore, the data met this assumption.
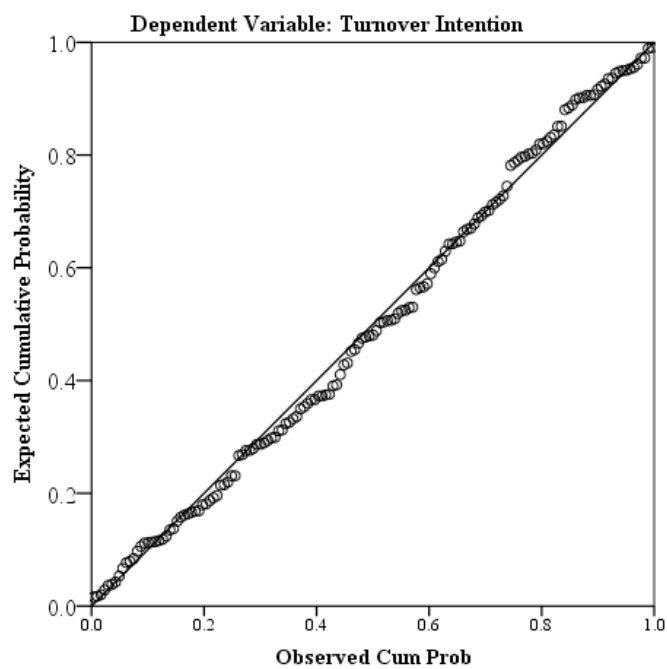
Figure 11. Normal probability P-P Plot of regression standardized residuals.
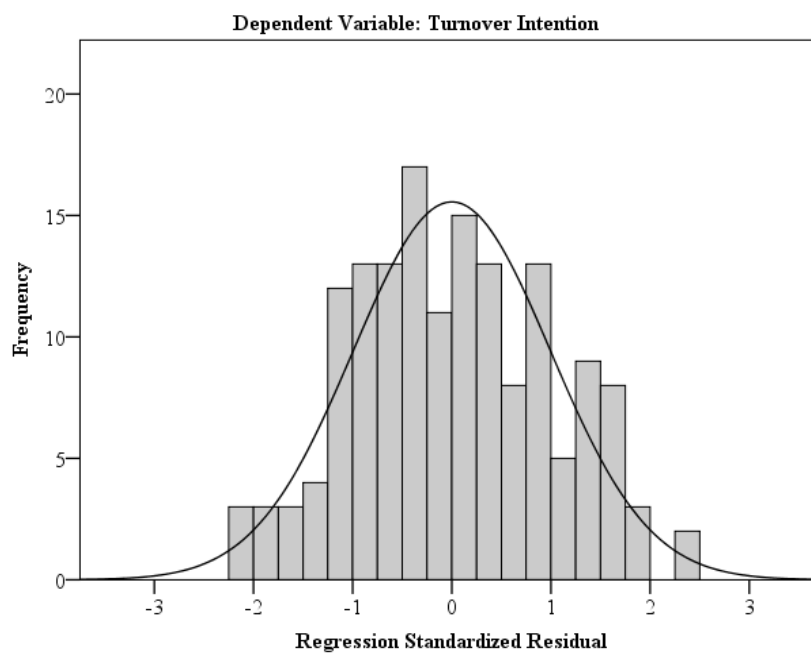
Figure 12. Frequency histogram of standardized residuals.

Homoscedasticity. I addressed the assumption of homoscedasticity with a scatterplot of the standardized residuals with the standardized predicted values (Figure 13). Belás and Gabcová (2016) reported that points distributed homogenously determine whether data meet assumptions. The findings of this research showed that there was a nonrandom bivariate distribution of scores with an overabundance of scores forming a line from the upper left portion of the plot to the lower right portion of the plot, along with hardly any scores in the lower left quadrant. The illustration of the data points formed because 50 participants (32.3%) had the lowest possible turnover intention score, again indicating they were significantly unlikely to leave their organizations (at the time of data collection). Therefore, the data did not meet the assumption of homoscedasticity, and the interpretation of data requires a process for evaluation in a more tentative fashion.
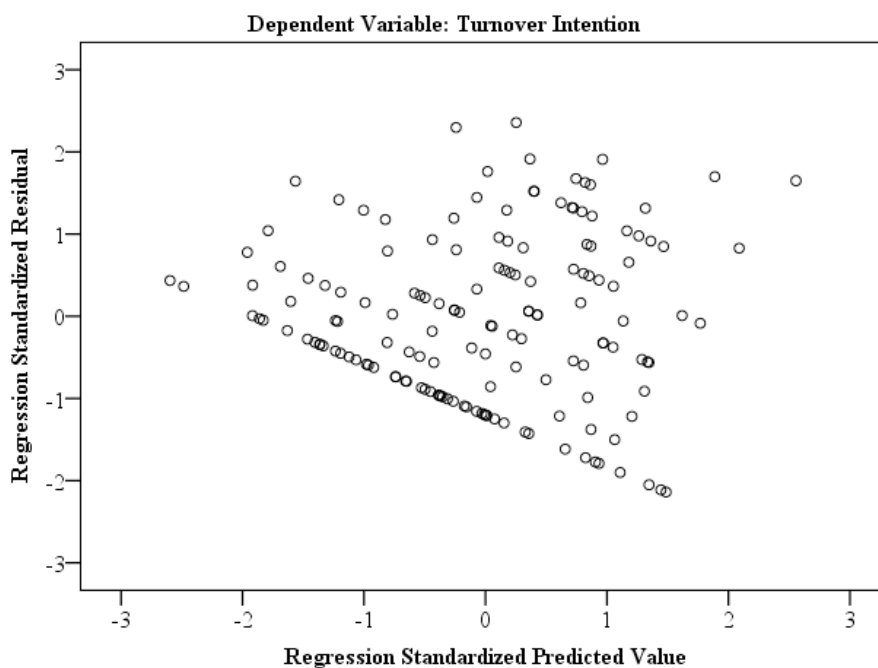
Figure 13. Scatterplot of standardized residuals and standardized predicted values.

Summary of statistical assumptions. In summary, the data met the statistical

assumptions about outliers, linearity, independence of observations, the absence of

multicollinearity and independence of residuals adequately. However, the data did not

meet the assumptions of normality for the dependent variable (turnover intention) or

homoscedasticity. Given that, I decided to include bootstrapping using 1,000 samples to

reduce the likelihood of wrong statistical conclusions (see de Crom & Rothmann, 2018).

The primary research question for this study was "do work engagement and job

satisfaction, predict nurse turnover intention in hospitals?" This research included null

and alternate hypotheses stating work engagement is or was not a statistically significant

predictor of nurse turnover intention at hospitals. Also, this research included null and

alternate hypotheses indicating that job satisfaction is or was not a statistically significant

predictor of nurse turnover intention at hospitals. I tested these hypotheses using a

multiple regression model (Table 7).

Regression Results. The purpose of this research was to examine the relationship

between work engagement and job satisfaction to predict nurse turnover intention in

hospitals. I used a multiple regression model to examine the relationship between job

satisfaction and work engagement. The null hypothesis, which examined the relationship

between work engagement and turnover intention, was rejected. The model revealed that

work engagement was not a statistically significant predictor of nurse turnover intention

(β = -.107, p = .38, Table 7). The alternate hypothesis, which examined the relationship

between job satisfaction and turnover intention, was supported. The model revealed that

job satisfaction was a statistically significant predictor of turnover intention (β = -.47, p <

.001) (see Table 4). Linear regression was computed using work engagement, job

satisfaction and demographic variables (i.e., age, years of experience and years of tenure)

to predict turnover intention. The multiple regression for work engagement, job

satisfaction, age, years of experience and tenure resulted in none of the demographic

questions being statistically significant (Table 7). Therefore, demographic variables did

not predict turnover intention.

Table 7

Regression Model Predicting Turnover Intention Based on Job Satisfaction, Work
Engagement, and Demographic Variables

Variable	*B*	*SE B*	B	*T*	*P*	Bootstrap 95%	*CI (B)*
Intercept	6.39	0.61		10.40	.001	[5.18,	7.66]
Work Engagement	-0.09	0.10	-.07	-0.89	.38	[-.30,	0.13]
Job Satisfaction	-0.86	0.14	-.47	-6.18	.001	[-1.18,	-0.56]
Age	-0.01	0.01	-.17	-1.10	.28	[-0.05,	0.01]
Years of Experience	0.03	0.01	.04	0.4	.81	[-0.02,	0.03]
Tenure	0.01	0.10	0.07	0.75	.46	[-0.01,	0.02]

Note. Full Model: $F (5, 154) = 12.008, p < 0.001. R^2 = .287$. Durbin -Watson = 2.08. $N =$

155.

Summary of the Results

I gathered surveys from 155 registered nurses to determine whether work

engagement and job satisfaction could predict nurse turnover intention in hospitals. The

predictor variables were work engagement and job satisfaction, and the dependent

variable was turnover intention. The results of the regression model, (F (5,154) = 12.008, p <.001. R^2 = .287. indicated a statistically significant relationship between turnover intention and job satisfaction but not between turnover intention and either work engagement, age, years of experience, or tenure (see Table 7). Therefore, the null hypothesis concerning work engagement was rejected and the alternatie hypothesis concerning job satisfaction was accepted.

My findings are supported by the findings of Andresen et al. (2016); Asegid et al. (2014), Chen & Taylor, 2016, Dusek et al. (2014), Linh et al. (2016), Maqbali, (2015), Mathieu et al., 2015, Mazurenko, et al., 2015; Metani et al., 2016; Mobley, 1982; Semachew et al., 2017; Spector, 1997), all of whom found job satisfaction or some element of job satisfaction to be significantly related to turnover intention. Also supporting my findings is the research of Teoh, Coyne, Devonish, Leather, and Zarola's (2016), who found no significant correlation between work engagement and turnover intention.

My findings are not entirely inconsistent with TRA, the theoretical framework for my research. According to the TRA, individuals' beliefs manifest as attitudes that can predict their behaviors. In a follow-up research, Ajzen and Fishbein (1980) expanded the theory so as to explain the progression of an individual's conscious decision-making efforts, which supposedly evolve from such external variables as demographics, behavioral beliefs, attitudes, subjective norms, and behavioral intention, and result in particular behaviors. My research found no significant correlation between demographics and turnover intention.

Applications to Professional Practice

Healthcare delivery is a demanding field, and the delivery of exceptional patient care requires a dedicated and satisfied workforce. Registered nurses have a vital role in the healthcare delivery system and especially in ensuring patient safety and satisfaction. The findings of this research may assist the management teams of hospitals in focusing their effort to retain highly skilled and highly experienced nurses, especially in locations where there is an ongoing shortage of nurses. The improved retention of nurses could result in lower recruiting, hiring and onboarding costs, greater retention of institution knowledge and experience, improve patient safety and satisfaction, and better medical outcomes. Such results could improve the reputation, financial viability and economic sustainability of the healthcare organization.

Implications for Social Change

Improving the delivery of health services and enhancing the healthcare experiences of patients could be a positive social change for the community that is served by that healthcare organization. Improving the reputation, financial viability and sustainability of a healthcare organization could have a positive effect on the economy, sustainability, quality of life, and attractiveness of the surrounding community. Also, a more stable workforce could reduce community disruptions caused by the constant turnover of community residents.

Recommendations for Action

The findings of this research indicate that their degree of job satisfaction can have a significant influence on the turnover intention of registered nurses. Job satisfaction, as

measured by the JSS survey instrument consists of nine primary job-related constructs. The nine job-related constructs were (a) pay, (b) promotion, (c) supervision, (d) fringe benefits, (e) contingent benefits, (f) operating procedures, (g) coworkers, (h) nature of work, and (i) communication. Rather than leaders of healthcare organizations just proceeding with additional programs to address each of these job-related constructs, I suggest that leaders should develop strategies to regularly and continuoiusly assess their nurses' degree of overall job satisfaction and satisfaction with each of the nine job satisfaction constructs. I recommend regularly scheduled quarterly job satisfaction surveys using a valid survey instrument such as the JSS. Additionally, managers and supervisors should receive training on how to observe and engage an employee in conversations to assess an employee's relative satisfaction with each of the nine job satisfaction constructs. The results of the surveys and the feedback from managers and supervisors should then be the basis for determining specific initiatives to address individual and group dissatisfactions. The feedback from regularly scheduled surveys and from managers and supervisors would also assist leaders in assessing the effectiveness of recent efforts and initiatives.

I will share the findings of this research with the leadership of the New York Chapter of the American Nurses' Association and with the New York Chapter of the National Association of Health Care Executives. I hope that members of these organizations will pass my recommendations along to hospital and nursing leaders, who may use them as a basis to develop strategic initiatives for reducing turnover. I will also provide an executive summary of my findings to chief nursing officers, of various

hospitals to be shared with hospital managers and nursing leadership and staff. As agreed, I will forward the findings of my research to the developers of the Work & Well-being Survey (UWES-9), the Job Satisfaction Survey, and the Turnover Intention Scale. Lastly, I intend to explore other professional, academic, and leadership forums, within the healthcare community that would be opportunities for shareing this research.

Recommendations for Further Research

I recommend that this research be replicated to see if the results would be similar in other heathcare organizations and in other locations. Replicating research serves to test researchers'findings and thereby contributing to the body of knowledge (see Hair, Anderson, Babin, & Black, 2010). It would also be useful to conduct similar research using other categories of healthcare professionals and employees to determine if there are significant differences from what was found in this research. The method and design of this research could also be used to examine the behavior of different types of employees in other industries and types of organizations.

The data for my research were gathered from a single period of time and although this approach yields useful findings, similar but longitudinal research could potentially yield additional insights into the relationship between job satisfaction and turnover intention. I used paper-based surveys in my research. I assumed that it was a convenient method for the participants. In retrospect, electronic surveys might be more convenient for participants and yield a higher response rate.

Reflections

In my own experience as a hospital administrator, I have witnessed the diminishing quality of care and an increased level of stress on the remaining nursing staff that occurs when a nurse leaves an organization. I have also overheard numerous complaints from nurses regarding the demands of the profession and the work environment. I decided to study these nurses' concerns in an effort to identify some of the factors that associated with their work engagement and job satisfaction or lack thereof.

The DBA doctoral research process provided an opportunity to acquire knowledge and identify, through research, factors that may help to clarify the daily challenges encountered by nurses. I initially assumed that nurses' reasons for leaving a given employer would be related to dissatisfaction with salaries, benefits, and promotional opportunities. After having conducted this research, however, came to the conclusion that although these factors are important, the lack of promotional opportunities, fringe benefits, contingent rewards, and operational conditions—not low salaries—that factored mainly into nurses' considerations about leaving a hospital organization. These issues deserve the attention of hospital administrators because nurses play a significant role in the delivery of quality patient care. Their development of positive relationships with patients, their families, and other staff are crucial to promoting a collaborative work environment and improving clinical outcomes.

Conclusion

Nurses have a significant function in the U.S. health care system. According to some reports, the United States may soon be faced with a critical shortage of nurses

(Snavely, 2016). Factors contributing to this shortage include an aging U.S. population that needs more nurse care, a decline in enrollments at nursing schools, and the large number of experienced nurses approaching retirement age (Roulin et al., 2014). Hospital managers seek to retain a stable and qualified workforce while minimizing the costs, both financial and related to staff morale, associated with replacing experience registered nurses (Robson & Robson, 2016). A better understanding of why nurses consider leaving their employment, it is hoped, will provide hospital managers with insights that can inform programs designed to reduce the turnover of nurses.

Registered nurses play a crucial role in the delivery of healthcare. Without them, it would be impossible to main the quality of care and the health of patients and the surrounding community. Job satisfaction influences registered nurses' intent to remain employed in the profession or at the workplace, naturally. Reducing nurses' turnover removes replacement costs and contributes to patients' quality of care and to the maintenance of the health and social needs of the communities to which they belong.

References

Ababneh, K. I., & Al-Waqfi, M. A. (2016). The role of privacy invasion and fairness in understanding job applicant reactions to potentially inappropriate/discriminatory interview questions. *Personnel Review*, *45*, 392-418. doi:10.1108/PR-11-2014-0264

Abed, F., & Elewa, A. H. (2016). The relationship between organizational support, work engagement and organizational citizenship behavior as perceived by staff nurses at different hospitals. *IOSR Journal of Nursing and Health Science*, *5*(4), 113-123. doi:10.9790/1959-050405113123

Abualrub, R. F., & Alghamdi, M. G. (2012). The impact of leadership styles on nurses' satisfaction and intention to stay among Saudi nurses. *Journal of Nursing Management*, *20*, 668-678. doi:10.1111/j.1365-2834.2011.01320.x

Abubakar, R. A., Chauhan, A., & Kura, K. M. (2014). Role of demographic variables in predicting turnover intention among registered nurses in Nigerian public hospitals. *International Journal of Business and Techopreneurship*, *4*, 373-383. Retrieved from ijbt.unimap.edu.my/

Abu-El Samen, A. A., Akroush, M. N., & Abu-Lail, B. (2013). Mobile SERVQUAL. *International Journal of Quality & Reliability Management*, *30*, 403-425. doi:10.1108/02656711311308394

Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it? *Indian Journal of Medical Specialties*, *4*, 330-333. doi:10.7713/ijms.2013.0032

Adams, J. S. (1963). Toward an understanding of inequity. *Journal of Abnormal and Social Psychology*, *67*, 422-436. doi:10.1037/h0040968

Africa, L. M. (2017). Transition to practice programs: Effective solutions to achieving strategic staffing in today's healthcare systems. *Nursing Economic$*, *35*(4), 178-183. Retrieved from http://www.nursingeconomics.net

Agbozo, G. K., Owusu, I. S., Hoedoafia, M. A., & Atakorah, Y. B. (2017). The effect of work environment on job satisfaction: Evidence from the banking sector in Ghana. *Journal of Human Resource Management*, *5*(1), 12-18. doi:10.11648/j.jhrm.20170501.12

Agoi, L. F. (2015). Effect of work engagement on employee turnover intention in public sector, Kenya. *International Journal of Economics, Commerce, and Management*, *3*(12), 426-440. Retrieved from http://ijecm.co.uk

Agoston, S. I. (2014). Intellectual capital in social enterprises. *Management & Marketing*, *9*, 423-438. Retrieved from http://www.managementmarketing.ro

Ahmad, N. M. N. N., Nawawi, A., & Salin, A. S. A. P. (2016). The relationship between human capital and directors' remuneration of Malaysian public listed companies. *International Journal of Business and Society*, *17*, 347-364. Retrieved from http://www.ijbs.unimas.my

Ahmad, N., Rizvi, A., & Bokhari, S. N. (2017). Impact of employees' voice on employees' effectiveness. *Journal of Business Strategies*, *11*(1), 79-98. Retrieved from http://www.emeraldinsight.com/journal/jbs

Ahmed, U., Majid, A. H. A., & Zin, M. L. M. (2016). HR moderating HR: Critical link between developmental HR practices and work engagement in a moderated model. *Management Review: An International Journal*, *11*(2), 4-22. Retrieved from https://connect.informs.org

Aidla, A. (2013). Perceptions of negative inequity at work and the behavior of individuals. *GSTF (Global Science and Technology Forum) International Journal on Business Review*, *2*, 234-239. doi:10.5176/2010-4804_2.3.242

Aigbogun, O., Ghazali, Z., & Razali, R. (2017). The impact of regulatory function on supply chain resilience: Reliability of measurement scales. *Global Business and Management Research: An International Journal*, *9*, 524-531. Retrieved from http://www.gbmr.ioksp.com/vol9no1s.htm

Ajzen, I. (1985). From intentions to action: A theory of planned behavior. In Kuhl, J., Baeckman, and J. (Eds.), *Action Control: From Cognitions to Behaviors* (pp. 11-39). New York, NY: Springer.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*, 179-211. doi:10.1016/0749-5978(91)90020-T

Ajzen, I. (2005). *Attitude*s, *personality, and behavior* (2nd ed.). New York, NY: Open University Press.

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior,* Prentice Hall, Englewood Cliffs, NJ: Prentice Hall.

Ajzen, I., & Fishbein, M. (2005). The influence of attitudes on behavior. In D. Albarracín, B. T. Johnson, & M. P. Zanna (Eds.), *The handbook of attitudes* (pp. 173-221). Mahwah, NJ: Lawrence Erlbaum.

Akyürek, C. E., Sawalha, R., & Ide, S. (2015). Factors affecting the decision making process in healthcare institutions. *Academy of Strategic Management Journal*, *14*, 1-14. Retrieved from http://www.abacademies.org

Al-Ajam, A., & Khalil, M. N. (2015). Challenges of adoption of Internet banking service in Yemen. *International Journal of Bank Marketing*, *33*, 178-194. doi:10.1108/IJBM-01-2013-0001

AlAnazi, A. A., Mohd-Shamsudin, F., & Johari, J. (2016). Linking organisational culture, leadership styles, human resource management practices and organisational performance: Data screening and preliminary analysis. *American Journal of Management*, *16*(1), 70-79. Retrieved from http://www.na-businesspress.com

Alatawi, M. A. (2017). Can transformational managers control turnover intention? *SA Journal of Human Resource Management*, *15*, 1-6. doi:10.4102/sajrhrm.v15i0.873

Aldhmour, F., & Sarayrah, I. (2016). An investigation of factors influencing consumers' intention to use online shopping: An empirical study in South of Jordan. *Journal of Internet Banking and Commerce*, *21*(2), 1-50. Retrieved from http://www.icommercecentral.com

Al-Dossary, R., Vail, J., & Macfarlane, F. (2012). Job satisfaction of nurses in a Saudi Arabian university teaching hospital: A cross-sectional study. *International Nursing Review*, *59*, 424-430. doi:10.111/j.1466-7657.2012.00978.x

Alfes, K., Shantz, A., & Alahakone, R. (2016). Testing additive versus interactive effects of person-organization fit and organizational trust on engagement and performance. *Personnel Review*, *45*, 1323-1339. doi:10.1108/PR-02-2015-0029

Ali, N., Tretiakov, A., & Whiddett, D. (2014). A content validity study for a knowledge management systems success model in healthcare. *JITTA: Journal of Information Technology Theory and Application*, *15*(2), 21-35. Retrieved from aisel.aisnet.org/jitta

Aliahmadi, A., Mozafari, A., Jafari-eskandari, M., & Nozari, H. (2016). Comparing linear regression and artificial neural networks to forecast total productivity growth in Iran. *International Journal of Information*, *Business and Management*, *8*(1), 93-113. Retrieved from https://ijibm.elitehall.com

Aliche, I. (2013). *Factors that contribute to phlebotomy-related needlestick injuries among clinical laboratory workers in Eastern Nigeria* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (3550304)

Almandeel, S. M. (2017). The mediating role of transformational leadership style on relationship between personality type and turnover intention in Saudi Arabian banking context. *International Journal of Organizational Leadership*, *6*(1), 109-136. Retrieved from http://aimijournal.com

Almeida, L. A. G., Pereira, E. T., & Tavares, F. O. (2015). Determinants of dividend policy: Evidence from Portugal. *Revista Brasileira De Gestão De Negócios*, *17*, 701-719. Retrieved from https://rbgn.fecap.br/RBGN

Alswat, K., Rawia Ahmad, M. A., Tit, M. A., Bakash, M., Mehmood, F., Zubiri, B., … El-Jardali, F. (2017). Improving patient safety culture in Saudi Arabia (2012-2015): Trending, improvement and benchmarking. *BMC* (*BioMed Central*) *Health Services Research*, *17*(794), 1-15. doi:10.1186/s12913-017-2461-3

Aly, N. A. E. M., & El-Shanawany, A. (2016). Nurses' organizational trust: Its impacts on nurses' attitudes towards change in critical care and toxicology units. *International Journal of Information*, *Business and Management*, *8*, 205-223. Retrieved from https://ijibm.elitehall.com

Amarnath, B., & Himabindu, N. (2016). A comparison of stress management levels in three coroperate hospitals at Hyderabad. *Splint International Journal of Professionals*, *3*(1), 48-59. Retrieved from http://www.splintjournal.in/previous_issue_v3_i1_2016.html

Amirat, K., Ziani, N., & Messadi, D. (2016). Chemometric modeling to predict retention times for a large set of pesticides or toxicants using hybrid genetic algorithm/multiple linear regression approach. *Management of Environmental Quality*, *27*, 313-325. doi:10.1108/MEQ-05-2015-0080

Andalib, T. W. (2016). A process of developing an HRM framework based on qualitative study in technology companies in Bangladesh and Malaysia. *International Journal of Research in Business and Social Science*, *3*(2), 148-163. doi:10.20525/ijrbs.v3i2.103

Andresen, I. H., Hansen, T., & Grov, E. K. (2016). Norwegian nurses' quality of life, job satisfaction, as well as intention to change jobs. *Nordic Journal of Nursing Research*, *37*, 90-99. doi:10.1177/2057158516676429

Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management*, *63*, 308-323. doi:10.1108/ijppm-01-2013-0008

Annamdevula, S., & Bellamkonda, R. S. (2016). Effect of student perceived service quality on student satisfaction, loyalty and motivation in Indian universities. *Journal of Modelling in Management*, *11*, 488-517. Retrieved from 10.1108/JM2-01-2014-0010

Apuke, O. D. (2017). Quantitative research methods a synopsis approach. *Arabian Journal of Business and Management Review (Kwait Chapter)*, *6*, 40-47. doi:10.12816/0040336

Aravamudhan, N. R., & Krishnaveni, R. (2015). Recruitment and selection building scale: Content validity evidence. *School of Communication and Management Studies (SCMS) Journal of Indian Management*, *12*(3), 58-73. Retrieved from http://www.scmsgroup.org

Armstrong-Stassen, M., Freeman, M., Cameron, S., & Rajacich, D. (2015). Nurse managers' role in older nurses' intention to stay. *Journal of Health Organization and Management*, *29*(1), 55-74. doi:10.1108/JHOM-02-2013-0028

Asamoah, M. K. (2014). Re-examination of the limitations associated with correlational research. *Journal of Educational Research and Reviews*, *2*(4), 45-52. Retrieved from http://www.sciencewebpublishing.net

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* (Article ID 909768), 1-26. doi:10.1155/2014/909768

Azanza, G., Moriano, J. A., Molero, F., & Lévy Mangin, J. (2015). The effects of authentic leadership on turnover intention. *Leadership & Organization Development Journal*, *36*, 955-971. doi:10.1108/LODJ-03-2014-0056

Aziz, S., Uhrich, B., Wuensch, K. L., & Swords, B. (2013). The workaholism analysis questionnaire: Emphasizing work-life imbalance and addiction in the measurement of workaholism. *Journal of Behavioral and Applied Management*, *14*(2), 71-86. Retrieved from http://jbam.scholasticahq.com

Baban, E. G. (2015). Management and leadership-features in the contemporary context. *Manager, 22*, 101-109. Retrieved from http://www.manager.unibuc.ro

Bachleda, C. L., & Bennani, A. (2016). Personality and interest in the visual arts. *Arts and the Market*, *6*, 126-140. doi:10.1108/AAM-02-2014-0012

Bakhtiari, A. A., Hematian, A., & Sharifi, A. (2015). Energy analyses and greenhouse gas emissions assessment for saffron production cycle. *Environmental Science and Pollution Research International*, *22*, 16184-16201. doi:10.1007/s11356-015-4843-6

Bakker, A. B., & Demerouti, E. (2014). Job demands-resources theory. In P.Y. Chen & C. L. Cooper (Eds.), *Work and wellbeing: A complete reference guide* (pp. 37-64). Chichester, England: Wiley-Blackwell.

Barnes, D. C., & Collier, J. E. (2013). Investigating work engagement in the service environment. *Journal of Services Marketing*, *27*, 485-499. doi:10.1108/JSM-01-2012-0021

Barreto, H., & Raghav, M. (2013). Understanding and teaching unequal probability of

    selection. *Journal of Econometric Methods*, *2*, 101-112. doi:10.1515/jem-2012-

    0017

Bass, B. M. (1998). *Transformational leadership: Military and civilian impact*. Mahwah,

    NJ: Lawrence Erlbaum.

Batura, N., Skordis-Worrall, J., Thapa, 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* (*BioMed Central*) *Health Services*

    Research, *16*(308), 1-13. doi:10.1186/s12913-016-1558-4

Baujard, A. (2015). Bernhard Kittel, Wolfgang J. Luhan and Rebecca B. Morton:

    Experimental political science: Principles and practices. *Social Choice and*

    Welfare, *45*, 231-237. doi:10.1007/s00355-014-0860-5

Belás, J., & Gabcová, L. (2016) The relationship among customer satisfaction, loyalty

    and financial performance of commercial banks. *E+M Ekonomie a Management,*

    19(1), 132-147. doi:10.15240/tul/001/2016-1-010

Benkhadra, K., Adusumalli, J., Rajjo, T., Hagen, P. T., Wang, Z., & Murad, M. H.

    (2016). A survey of health care needs of physicians. *BMC* (*BioMed Central*)

    Health Services Research, *16*(475), 1-5. doi:10.1186/s12913-016-1728-4

Benson, D. (2015). The five fundamental tasks of a transformational leader. *Physician*

    Leadership Journal, *2*(5), 58-62. Retrieved from

    http://www.physicianleaders.org/publications/journal

Bezzina, F., & Saunders, M. (2014). The pervasiveness and implications of statistical

    misconceptions among academics with a special interest in business research

    methods. *Electronic Journal of Business Research Methods*, *12*(2), 29-42.

    Retrieved from http://www.ejbrm.com

Bhattacharya, M. (2015). A conceptual framework of RFID adoption in retail using

    Rogers stage model. *Business Process Management Journal*, *21*, 517-540.

    doi:10.1108/BPMJ-06-2014-0047

Biron, M., & Boon, C. (2013). Performance and turnover intentions: A social exchange

    perspective. *Journal of Managerial Psychology*, *28*, 511-531. doi:10.1108/JMP-

    09-2011-0054

Blau, P. M. (1964). *Exchange and power in social life*. New York, NY: Wiley.

Blomme, R. J., Kodden, B., & Beasley-Suffolk, A. (2015). Leadership theories and the

    concept of work engagement: Creating a conceptual framework for management

    implications and research. *Journal of Management & Organization, 21*, 125-144.

    doi:10.1017/jmo.2014.71

Bloomberg, L. D., & Volpe, M. (2015). *Completing your qualitative dissertation: A road

    map from beginning to end*. Thousand Oaks, CA: Sage.

Boesch, I., Schwaninger, M., Weber, M., & Scholz, R. W. (2013). Enhancing validity and

    reliability through feedback-driven exploration: A study in the context of conjoint

    analysis. *Systematic Practice and Action Research*, *26*, 217-238.

    doi:10.1007/s11213-012-9248-6

Bolt, E. E., Pasman, H. R. W., Willems, D., & Onwuteaka-Philipsen, B. D. (2016).

> Appropriate and inappropriate care in the last phase of life: An explorative study
>
> among patients and relatives. *BMC* (*BioMed Central*) *Health Services*, *16*(655), 1-
>
> 11. doi:10.1186/s12913-016-1879-3

Borah, N., & Malakar, B. G. (2015). Impact of job embeddedness on leave intention.

> *School of Communication Management Studies* (*SCMS) Journal of Indian*
>
> *Management*, *12*(4), 83-91. Retrieved from Retrieved from
>
> http://www.scmsgroup.org

Borgström, B. (2012). Towards a methodology for studying supply chain practice.

> *International Journal of Physical Distribution & Logistics Management*, *42*, 843-
>
> 862. doi:10.1108/09600031211269785

Borlund, P. (2016). A study of the use of simulated work task situations in interactive

> information retrieval evaluations. *Journal of Documentation*, *72*, 394-413.
>
> doi:10.1108/JD-06-2015-0068

Boscart, V. M., Pringle, D., Peter, E., Wynn, F., & McGilton, K. S. (2016). Development

> and psychometric testing of the humanistic nurse-patient scale. *Canadian Journal*
>
> *on Aging*, *35*(1), 1-13. doi:10.1017/S0714980815000604

Bouten-Pinto, C. (2016). Reflexivity in managing diversity: A pracademic perspective.

> *Equality, Diversity and Inclusion: An International Journal, 35*, 136-153.
>
> doi:10.1108/EDI-10-2013-0087

Brandt, T., Laitinen, E. K., & Laitinen, T. (2016). The effect of transformational

> leadership on the profitability of Finnish firms. *International Journal of*
>
> *Organizational Analysis*, *24*(1), 81-106. doi:10.1108/IJOA-03-2014-0744

Bromwich, D. (2015). Understanding, interests and informed consent: A reply to

Sreenivasan. *Journal of Medical Ethics*, *41*, 327-331.doi:10.1136/medethics-

2013-101499

Bruggen, A. (2015). An empirical investigation of the relationship between workload and

performance. *Management Decision*, *53*, 2377-2389. Retrieved from

http://www.emeraldinsight.com/loi/md

Bryman, A. (2016). *Social research methods* (5th ed.). New York, NY: Oxford

University Press.

Burke, R. J., Dolan, S. L., & Fiksenbaum, L. (2014). Part-time versus full-time work: An

empirical evidence-based case of nurses in Spain. *Evidence-Based HRM* (*Human

Resource Management): A Global Forum For Empirical Scholarship*, *2*, 176-191.

doi:10.1108/EBHRM-02-2013-0001

Burns, J. M. (1978). *Leadership*. New York, NY: Harper and Row.

Bussing, A., Falkenberg, Z., Schoppe, C., Daniela, R. R., & Poier, D. (2017). Work stress

associated cool down reactions among nurses and hospital physicians and their

relation to burnout symptoms. *BMC* (*BioMed Central*) *Health Services Research,

17*(551), 1-13 doi:10.1186/s12913-017-2445-3

Butler, T. D., Armstrong, C., Ellinger, A., & Franke, G. (2016). Employer

trustworthiness, worker pride, and camaraderie as a source of competitive

advantage. *Journal of Strategy and Management*, *9*, 322-343. doi:10.1108/JSMA-

07-2015-0058

Cai, L., & Zhu, Y. (2015). The challenges of data quality and data quality assessment in

the big data era. *Data Science Journal, 14*(2), 1-10. doi:10.5334/dsj-2015-002

Campbell, D. E., Parks, C., & Wells, J. D. (2015). Understanding the role of theory on

    instrument development: An examination of strengths and weaknesses of

    discriminant validity analysis techniques. *JITTA*: *Journal of Information*

    Technology Theory and Application, *16*(1), 25-55. Retrieved from

    aisel.aisnet.org/jitta

Campione, W. A. (2015). Corporate offerings: Why aren't millennials staying? *Journal of*

    Applied Business and Economics, *17*(4), 60-75. Retrieved from

    http://www.na.businesspress.com/jabeopen

Centers for Medicare & Medicaid Services. (2017). *National health expenditure*

    projections 2016-2025 forecast summary. Retrieved from https://www.cms.gov/

Cerniglia, J. A., Fabozzi, F. J., & Kolm, P. N. (2016). Best practices in research for

    quantitative equity strategies. *Journal of Portfolio Management*, *42*(5), 135-143.

    doi:10.3905/jpm.2016.42.5.135

Cetin, S., Gürbüz, S., & Sert, M. (2015). A meta-analysis of the relationship between

    organizational commitment and organizational citizenship behavior: Test of

    potential moderator variables. *Employee Responsibilities and Rights Journal*, *27*,

    281-303. doi:10.1007/s10672-015-9266-5

Chang, E., Liu, A. Y., & Lin, S. (2015). Exploring privacy and trust for employee

    monitoring. *Industrial Management & Data Systems*, *115*, 88-106.

    doi:10.1108/IMDS-072014-0197

Chang, W. J., Wang, Y.-S., & Huang, T.-C. (2013). Work design-related antecedents of turnover intention: A multilevel approach. *Human Resource Management*, *52*, 1-26. Retrieved from http://www.onlinelibrary.wiley.com/journal/10.1002/(ISSN)1099-050X

Charkhabi, M., Sartori, R., & Ceschi, A. (2016). Work-family conflict based on strain: The most hazardous type of conflict in Iranian hospitals nurses. *SA Journal of Industrial Psychology*, *42*(1), 1-10. doi:10.4102/sajip.v42i1.1264

Charoensukmongkol, P., Moqbel, M., & Gutierrez-Wirsching, S. (2016). The role of co-worker and supervisor support on job burnout and job satisfaction. *Journal of Advances in Management Research*, *13*, 4-22, doi:10.1108/JAMR-06-2014-0037

Chatterjee, S., & Hadi, A. S. (2012). *Regression analysis by example* (5th ed.). Hoboken, NJ: Wiley.

Chau, J. P. C., Lo, S. H. S., Choi, K. C., Chan, E. L. S., McHugh, M. D., Tong, D. W. K., … & Lee, D. T. F. (2015). A longitudinal examination of the association between nurse staffing levels, the practice environment and nurse-sensitive patient outcomes in hospitals. *BMC* (*BioMed Central*) *Health Services Research*, *15*(538), 1-9. Retrieved from http://www.biomedcentral.com

Chen, Y. (2014). On the state of the American health care: A discussion of the health care system and the Affordable Care Act. *Journal of Applied Business and Economics*, *16*(6), 63-68. Retrieved from http://www.na-businesspress.com/jabeopen

Chen, C. H., & Taylor, M. (2016). An assessment of government regulation on adaptive capability and managerial strategy in U. S. healthcare. *International Management Review*. *12*(2), 5-19, 74. Retrieved from http://www.imrjournal.org/

Chen, S.-Y., Wu, W.-C., Chang, C.-S., Lin, C. T., Kung, J.-Y., Weng, H.-C., … Lee, S.-I. (2015). Organizational justice, trust, and identification and their effects on organizational commitment in hospital nursing staff. *BMC* (*BioMed Central*) *Health Services Research*, *15*(363), 1-17. doi:10.1186/s12913-015-1016-8

Chetty, R., Friedman, J. N., & Rockoff, J. E. (2014). Measuring the impacts of Teachers I: Evaluating bias in teacher value-added estimates. *American Economic Review*, *104*, 2593-2632. doi:10.1257/aer.104.9.2593

Chi, S. S., Friedman, R. A., & Lo, H. (2015). Vicarious shame and psychological distancing following organizational misbehavior. *Motivation and Emotion*, *39*, 795-812. doi:10.1007/s11031-015-9483-0

Chirkowska-Smolak, T. (2012). Does work engagement burn out? The person-job fit and levels of burnout and engagement in work. *Polish Psychological Bulletin*, *43*(2), 76-85. doi:10.2478/v10059-012-0009-2

Cho, Y. J., & Poister, T. H. (2014). Managerial practices, trust in leadership, and performance: Case of the Georgia department of transportation. *Public Personnel Management*, *43*, 179-196. doi:10.1177/0091020614523136

Christian, J. S., & Ellis, A. P. J. (2014). The crucial role of turnover intentions in transforming moral disengagement into deviant behavior at work. *Journal of Business Ethics*, *119*, 193-208. doi:10.1007/s10551-013-1631-4

Cianfrone, B. A., Zhang, J., Pitts, B., & Byon, K. K. (2015). Identifying key market demand factors associated with high school basketball tournaments. *Sport Marketing Quarterly*, *24*(1), 91-104. Retrieved from http://fitpublishing.com/journals/smq

Clark, O. L., Zickar, M. J., & Jex, S. M. (2014). Role definition as a moderator of the

    relationship between safety climate and organizational citizenship behavior

    among hospital nurses. *Journal of Business and Psychology*, *29*(1), 101-110.

    doi:10.1007/s10869-013-9302-0

Clarke, R. (2013). Data risks in the cloud. *Journal of Theoretical and Applied Electronic*

    Commerce Research, *8*(3), 59-73. Retrieved from http://www.jtaer.com

Clinton, E. (2016). Quantitative approximations of truth: A technical synopsis of internal

    validity in group design and single-case design research. *International Journal of*

    Humanities and Social Science Research, *2*(2), 18-21. Retrieved from

    http://www.ijhssnet.com

Cloutier, O., Felusiak, L., Hill, C., & Pemberton-Jones, E. (2015). The importance of

    developing strategies for employee retention. *Journal of Leadership,*

    Accountability and Ethics, *12*, 119-129. Retrieved from http://www.na-

    businesspress.com/JLAE/jlaescholar.html

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.).

    Hillsdale, NJ: Erlbaum.

Cohen, A., & Abedallah, M. (2015). The mediating role of burnout on the relationship of

    emotional intelligence and self-efficacy with OCB and performance. *Management*

    Research Review, *38*, 2-28. doi:10.1108/mrr-10-2013-0238

Collen, A. (2012). Knowledge, management, and learning when the context of the

    organization is planetary. *Learning Organization*, *19*, 371-385.

    doi:10.1108/09696471211226716

Consiglio, C., Borgogni, L., Di Tecco, C., & Schaufeli, W. B. (2016). What makes employees engaged with their work? The role of self-efficacy and employee's perceptions of social context over time. *Career Development International*, *21*, 125-143. doi.1108/CDI-03-2015-0045

Covella, G., McCarthy, V., Kaifi, B., & Cocoran, D. (2017). Leadership's role in employee retention. *Business Management Dynamics*, *7*, 1-15. Retrieved from www.bmdynamics.com

Coxen, L., van der Vaart, L., & Stander, M. W. (2016). Authentic leadership and organisational citizenship behaviour in the public health care sector: The role of workplace trust. *SA Journal of Industrial Psychology*, *42*(1), 1-13. doi:10.4102/sajip.v42i1.1364

Cullen, C. B., & Gordon, P. A. (2014). The relationship between leadership and communication skills of nurse managers and the organizational citizenship behaviors of medical-surgical nurses and nursing assistants. *Management and Organizational Studies*, *1*(2), 23-29. doi:10.5430/mos.v1n2p23

Dansereau, F., Graen, G. B., & Haga, W. (1975). A vertical dyad linkage approach to leadership in formal organizations. *Organizational Behavior and Human Performance*, *13*, 46-78. Retrieved from http://www.sciencedirect.com/journal/organizational-behavior-and-human-performance/issues

Darmody, M., & Smyth, E. (2016). Primary school principals' job satisfaction and occupational stress. *International Journal of Educational Management*, *30*, 115-128. doi:10.1108/IJEM-12-2014-0162

Dartey-Baah, K., & Ampofo, E. (2016). "Carrot and stick" leadership style: Can it predict

employees' job satisfaction in a contemporary business organization? *African*

Journal of Economic and Management Studies, *7*, 328-345. doi:10.1108/AJEMS-

04-2014-0029

Dasgupta, P. (2014). Nurses' intention to leave: A qualitative study in private hospitals.

Globsyn Management Journal, *8*(1), 77-87. Retrieved from

http://www.globsyn.edu.in

Dasgupta, P. (2015). Turnover intentions among nurses in private hospitals: Antecedents

and mediators. *Journal of Strategic Human Resource Management*, *4*(3), 1-15.

Retrieved from http://www.publishingindia.com/jshrm

de Albuquerque, A. E., Jr., & dos Santos, E. M. (2015). Adoption of information security

measures in public research institutes. *Journal of Information Systems and*

Technology Management, *12*, 289-315. doi:10.4301/s1807-17752015000200006

De Bruin, G. P., & Henn, C. M. (2013). Dimensionality of the 9-item Utrecht Work

Engagement Scale (UWES-9). *Psychological Reports*, *112*, 788-799.

doi:10.2466/01/03.PRO.112.3.788-799

de Crom, N., & Rothmann, S. (2018). Demands–abilities fit, work beliefs, meaningful

work and engagement in nature-based jobs. *South Asian Journal of Industrial*

Psychology (SAJIP), *44*(a1496), 1-12*,* doi:10.4102/sajip.v44i0.1496

Dedu, L. (2014). Algorithms for analyzing and forecasting in a pharmaceutical company.

Informatica Economica, *18*(3), 103-112. Retrieved from http://revistaie.ase.ro

Deery, M., & Jago, L. (2015). Revisiting talent management, work-life balance and

    retention strategies. *International Journal of Contemporary Hospitality*

    Management, *27*, 453-472. doi:10.1108/IJCHM-12-2013-0538

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*, 59-67. doi:10.1007/s10551-014-2196-6

Dempsey, C., & Reilly, B. A. (2016). Nurse engagement: What are the contributing

    factors for success? *OJIN: Online Journal of Issues in Nursing*, *21*(1), 1-12.

    doi:10.3912/OJIN.Vol21No01Man02

de Oliveira, D. R., Griep, R. H., Portela, L. F., & Rotenberg, L. (2017). Intention to leave

    profession, psychosocial environment and self-rated health among registered

    nurses from large hospitals in Brazil: A cross-sectional study. *BMC* (*BioMed*

    Central) *Health Service Research*, *17*(21), 17-21. doi:10.1186/s12913-016-1949-6

DeSimone, J. A., Harms, P. D., & DeSimone, A. J. (2015). Best practice

    recommendations for data screening. *Journal of Organizational Behavior*, *36*,

    171-181. doi:10.1002/job.1962

Dimaculangan, E. D., Jr., & Aguiling, H. M. (2012). The effects of transformational

    leadership on salesperson's turnover intention. *International Journal of Business*

    and Social Science, *3*(19), 197-210. Retrieved from http://www.ijbssnet.com

Dinev, T., Xu, H., Smith, J. H., & Hart, P. (2013). Information privacy and correlates: An

    empirical attempt to bridge and distinguish privacy-related concepts. *European*

    Journal of Information Systems, *22*, 295-316. doi:10.1057/ejis.2012.23

Dissanayake, K. (2015). Essentials of business research: A guide to doing your research project. *South Asian Journal of Management*, *22*(4), 193-196. Retrieved from http://www.sajm-amdisa.org

Dobbie, M. J., & Negus, P. (2013). Addressing statistical and operational challenges in designing large-scale stream condition surveys. *Environmental Monitoring and Assessment*, *185*, 7231-7243. doi:10.1007/s10661-013-3097-3

Dolado, J. J., Otero, M. C., & Harman, M. (2014). Equivalence hypothesis testing in experimental software engineering. *Software Quality Journal*, *22*, 215-238. doi:10.1007/s11219-013-9196-0

Dorazio, R. M. (2016). Bayesian data analysis in population ecology: Motivations, methods, and benefits. *Population Ecology*, *58*(1), 31-44, doi:10.1007/s10144-015-0503-4

Dugguh, S. I., & Ayaga, D. (2014). Job satisfaction theories: Traceability to employee performance in organizations. *International Organization of Scientific Research* (*IOSR*) *Journal of Business and Management*, *16*(5), 11-18. Retrieved from http:iosrjournals.org/losr-jbm.html

Dulany, D. E. (1968). Awareness, rules, and propositional control: A confrontation with S-R behavior theory. In T. Dixon, & D. Horton (Eds.), *Verbal behavior and general behavior theor*y, (pp. 340-387). New York, NY: Prentice Hall.

Durà-Vilà, V. (2013). Reply to walker: Ensuring understanding and intelligibility in informed consent. *Journal of Value Inquiry*, *47*, 221-233. doi:10.1007/s10790-013-9388-7

Dusek, G. A., Ruppel, C. P., Yurova, Y., & Clarke, R. (2014). The role of employee

    service orientation in turnover in the U.S. hotel industry. *Journal of*

    Organizational Culture, Communication and Conflict, *18*, 87-104. Retrieved from

    http://journals/journal-of-organizational-culture-communications-and-conflict-

    home.html

Eberth, B., Elliott, R. F., & Skåtun, D. (2016). Pay or conditions? The role of workplace

    characteristics in nurses' labor supply. *European Journal of Health Economics*,

    17, 771-785. doi:10.1007/s10198-015-0733-6

Emami, A., & Safipour, J. (2013). Constructing a questionnaire for assessment of

    awareness and acceptance of diversity in healthcare institutions. *BMC* (*Biomed*

    Central) *Health Services Research*, *13*(145), 1-10. doi:10.1186/1472-6963-13-145

Engelbrecht, A. S., Wolmarans, J., & Mahembe, B. (2017). Effect of ethical leadership

    and climate on effectiveness. *SA Journal of Human Resources Management*,

    15(a781), 1-8. doi:10.4102/sajhrm.v15i0.781

Everhart, D., Neff, D., Al-Amin, M., Nogle, J., & Weech-Maldonado, R. (2013). The

    effects of nurse staffing on hospital financial performance: Competitive versus

    less competitive markets. *Health Care Management Review*, *38*(2), 146-155.

    doi:10.1097/HMR.0b0013e31825729b

Fang, L., & Hung, C. (2014). Predictors of married female nurses' health. *Workplace*

    Health & Safety, *62*, 447-455. doi:10.3928/21650799-20140804-06

Faria, R., Gomes, M., Epstein, D., & White, I. R. (2014). A guide to handling missing data in cost-effectiveness analysis conducted within randomised controlled trials. *PharmacoEconomics*, *32*, 1157-1170. Retrieved from http://www.springer.com/journal/40273

Farooq, R. (2016). Role of structural equation modeling in scale development. *Journal of Advances in Management Research*, *13*, 75-91. doi:10.1207/S15328007SEM1004_8

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. -G. (2009). Statistical power analyses using G*Power 3:1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*, 1149-1160. doi:10.3758/brm.41.4.1149

Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). Thousand Oaks, CA: Sage.

Figgou, L., & Pavlopoulos, V. (2015). Social psychology: Research methods. *International Encyclopedia of the Social & Behavioral Sciences* (2nd ed.), *21*, 544-552. doi:10.1016/B978-0-08-097086-8.24028-2

Fila, M. J., Paik, L. S., Griffeth, R. W., & Allen, D. (2014). Disaggregating job satisfaction: Effects of perceived demands, control, and support. *Journal of Business and Psychology*, *29*, 639-649. doi:10.1007/s10869-014-9358-5

Fishbein, M. (1963). An investigation of the relationship between beliefs about an object and the attitude toward that object. *Human Relations*, *16*, 233-239. doi:10.1177/001872676301600302

Fishbein, M. (1967). A behavior theory approach to the relations between beliefs about an object and the attitude toward the object. In M. Fishbein (Ed.), *Attitude Theory and Measurement* (pp. 389-400). New York, NY: Wiley.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.

Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*. New York, NY: Psychology Press.

Fisher, J. A. (2013). Expanding the frame of "voluntariness" in informed consent: Structural coercion and the power of social and economic context. *Kennedy Institute of Ethics Journal*, *23*, 355-379. doi:10.1353/ken.2013.0018

Fleischer, A., Mead, A. D., & Huang, J. (2015). Inattentive responding in MTurk and other online samples. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, *8*, 196-202. doi:10.1017/iop.2015.25

Flint, D., Haley, L. M., & McNally, J. J. (2013). Individual and organizational determinants of turnover intent. *Personnel Review*, *42*, 552-572. doi:10.1108/PR-03-2012-0051

Fluegge-Woolf, E. R. (2014). Play hard, work hard: Fun at work and job performance. *Management Research Review*, *37*, 682-705. doi:10.1108/MRR-11-2012-0252

Font, B. (2016). Bootstrap estimation of the efficient frontier. *Computational Management Science*, *13*, 541-570. doi:10.1007/s10287-016-0257-2

Francis, R. D. (2014). Assumptions and deeming. *Journal of Financial Crime*, *21*, 204-214. doi:10:1108/JFC-07-2013-0049

Frankforter, S. A., & Guidry, T. L. (2015). Who needs ETS? How to create a

    psychometric assessment test. *American Journal of Management*, *15*, 73-80.

    Retrieved from http://www.na-businesspress.com

Freitas da Costa Freire, C. M., & Machado Azevedo, R. M. (2015). Empowering and

    trustful leadership: Impact on nurses' commitment. *Personnel Review*, *44*, 702-

    719. doi:10.1108/PR-01-2014-0021

Friedman, H. H., Fireworker, R. B., & Nagel, H. (2017). Biasing research: Can science

    be trusted? *Journal of Leadership, Accountability and Ethics*, *14*(2), 105-116.

    Retrieved from https:// www.na-businesspress.com

Friese, C. R., Xia, R., Ghaferi, A., Birkmeyer, J. D., & Banerjee, M. (2015). Hospitals in

    'magnet' program show better patient outcomes on mortality measures compared

    to non-'magnet' hospitals. *Health Affairs*, *34*, 986-992, 1-12.

    doi:10.1377/hlthaff.2014.0793.

Furunes, T., Mykletun, R. J., Einarsen, S., & Glaso, L. (2015). Do low-quality leader-

    member relationships matter for subordinates: Evidence from three samples on

    the validity of the Norwegian LMX scale. *Nordic Journal of Working Life*

    Studies, *5*(2), 71-87. doi:10.1019154/njwls.v5i2.4794

Gabrani, A., Hoxha, A., Gabrani, J., Petrela, E., Zaimi, E., & Avdullari, E. (2016).

    Perceived organizational commitment and job satisfaction among nurses in

    Albanian public hospitals: A cross-sectional study. *International Journal of*

    Healthcare Management, *9*(2), 110-118. doi:10.1179/2047971915Y.0000000019

Geiger-Brown, J., Rogers, V. E., Trinkoff, A. M., Kane, R. L., Bausell, R. B., & Scharf,

    S. M. (2012). Sleep, sleepiness, fatigue, and performance of 12-hour shift nurses.

    Chronobiology International. *29*, 211-219. Retrieved from

    http://www.tandfonline.com

George, C. (2015). Retaining professional workers: What makes them stay? *Employee*

    Relations, *37*, 102-121. doi:10.1108/ER-10-2013-0151

George, E., & Zakkariya, K. A. (2015). Job related stress and job satisfaction: A

    comparative study among bank employees. *Journal of Management Development*,

    34, 316-329, doi:10.1108/JMD-07-2013-0097

Ghosh, M. (2015). An empirical study on hospital selection in India. *International*

    Journal of Health Care Quality Assurance, *28*, 27-39. doi:10.1108/IJHCQA-06-

    2013-0073

Ghosh, P., Rai, A., & Chauhan, R., Gupta, N., & Singh, A. (2015). Exploring the

    moderating role of context satisfaction between job characteristics and turnover

    intention of employees of Indian public sector banks. *Journal of Management*

    Development, *34*, 1019-1030. doi:10.1108/JMD-10-2014-0138

Giauque, D. (2015). Attitudes toward organizational change among public middle

    managers. *Public Personnel Management*, *44*, 70-98.

    doi:10.1177/0091026014556512

Gilliam, D. A., & Rayburn, S. W. (2016). Propensity for reciprocity among frontline

    employees. *Journal of Services Marketing*, *30*, 290-301. doi:10.1108/JSM-05-

    2015-0194

Gobo, G. (2015). The next challenge: From mixed to merged methods. *Qualitative Research in Organizations and Management: An International Journal*, *10,* 329-331. doi:10.1108/QROM-07-2015-1309

Golden, R. M., Henley, S. S., White, H., & Kashner, T. M. (2016). Generalized information matrix tests for detecting model misspecification. *Econometrics*, *4*(4), 1-24, doi:10.3390/econometrics4040046

Gorgievski, M. J., Moriano, J. A., & Bakker, A. B. (2014). Relating work engagement and workaholism to entrepreneurial performance. *Journal of Managerial Psychology*, *29,* 106-121. doi:10.1108/JMP-06-2012-0169

Gorjidooz, J., & Greenman, C. (2014). Marital status, religiosity, and experience as a predictor of ethical awareness among accounting professionals. *Journal of Business & Economics Research*, *12*, 125-135. doi.org/10.19030/jber.v12i2.8526

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

Grady, C. (2015). Enduring and emerging challenges of informed consent. *New England Journal of Medicine*, *372*, 855-862. doi:10.1056/NEJMra1411250

Green, S. B., & Salkind, N. J. (2013). *Using SPSS for Windows and Macintosh: Analyzing and understanding data* (7th ed.). Upper Saddle River, NJ: Pearson, Prentice Hall.

Gregor, S., & Klein, G. (2014). Eight obstacles to overcome in the theory testing genre. *Journal of the Association for Information Systems*, *15*(11), 1-19. Retrieved from http://aisel.aisnet.org/jais

Grieve, R., & Hayes, J. (2016). Employment testing online, offline, and over the phone: Implications for e-assessment. *Revista De Psicología Del Trabajo y de las Organizaciones*, *32*, 95-101. doi:10.1016/j.rpto.2016.04.001

Guha, S., & Chakrabarti, S. (2016). Differentials in attitude and employee turnover propensity: A study of information technology professionals. *Global Business and Management Research: An International Journal*, *8*, 1-17. Retrieved from http://www.gbmr.ioksp.com

Guinot, J., Chiva, R., & Roca-Puig, F. (2014). Interpersonal trust, stress, and satisfaction at work: An empirical study. *Personnel Review*, *43*, 96-115. doi:10.1108/PR-02-2012-0043

Gülbahar, B. (2017). The relationship between work engagement and organizational trust: A study of elementary school teachers in Turkey. *Journal of Education and Training Studies*, *5*(2), 149-159. doi:10.11114/jets.v5i2.2052

Guo, Y., Kopec, J., Cibere, J., Li, L., & Goldsmith, C. (2016). Population survey features and response rates: A randomized experiment. *American Journal of Public Health (AJPH)*, *106*, 1422-1426. Retrieved from http://www.ajph.aphapublications.org

Gupta, M. (2015). A study on employee's perception towards employee engagement. *Globsyn Management Journal*, *9*(1), 45-51. Retrieved from http://www.globsyn.edu.in/research/management_journal.php

Guzzo, R. A., Fink, A. A., King, E., Tonidandel, S., & Landis, R. S. (2015). Big data recommendations for industrial-organizational psychology. *Industrial and Organizational Psychology*, *8*, 491-508. doi:10.1017/iop.2015.40

Haar, J. M., de Fluiter, A., & Brougham, D. (2016). Abusive supervision and turnover

    intentions: The mediating role of perceived organisational support. *Journal of*

    Management and Organization, *22*, 139-153. doi:10.1017/jmo.2015.34

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of

    a theory. *Organizational Behavior and Human Performance*, *16*, 250-279.

    doi:10.1016/0030-5073(76)90016-7

Hadjicharalambous, C., & Shi, Z. (2015). Attitudes toward ethical sensitivity:

    Implications related to gender identity and personality. *Journal of Legal, Ethical*

    and Regulatory Issues, *18*(3), 31-44. Retrieved from

    http://www.abacademies.org/journals/journal-of-legal-ethical-and-regulatory-

    issues-home.html

Haeruddin, M. I. M., & Natsir, U. D. (2016). The cat's in the cradle 5 personality types'

    influence on work–family conflict of nurses. *Economics & Sociology*, *9*(3), 99-

    110. doi:10.14254/2071-789X.2016/9-3/9

Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2010). *Multivariate data*

    analysis: A global perspective (7th ed.). Upper Saddle River, NJ: Pearson

Hairr, D. C., Salisbury, H., Johannsson, M., & Redfern-Vance, N. (2014). Nurse staffing

    and the relationship to job satisfaction and retention. *Nursing Economic$*, *32*(3),

    142-147. Retrieved from http://www.nursingeconomics.net/cgi-bin

Hall, T. (2015). Does cohesion positively correlate to performance in all stages of a group's life cycle? *Journal of Organizational Culture, Communication and Conflict*, *19*, 58-71. Retrieved from http://www.alliedacademies.org /journals/journal-of-organizational-culture-communications-and-conflict-home.html

Halter, M., Boiko, O., Pelone, F., Beighton, C., Harris, R., Gale, J., … Drennan, V. (2017). The determinants and consequences of adult nursing staff turnover: A systematic review of systematic reviews. *BMC* (*BioMed Central*) *Health Services Research*, *17*(824), 2-20. doi:10.1186/s12913-017-2707-0

Hamdan, M., & Hamra, A. A. (2017). Burnout among workers in emergency departments in Palestinian hospitals: Prevalence and associated factors. *BMC* (*BioMed Central*) *Health Services Research*, *1*(407), *1-8*. doi:10.1186/s12913-017-2356-3

Han, K., Trinkoff, A. M., & Geiger-Brown, J. (2014). Factors associated with work-related fatigue and recovery in hospital nurses working 12-hour shifts. *Workplace Health & Safety*, *62*, 409-414. doi:10.3928/21650799-20140826-01

Haneef, N. (2013). Empirical research consolidation: A generic overview and a classification scheme for methods. *Quality and Quantity*, *47*, 383-410. doi:10.1007/s11135-011-9524-z

Harris, A. (2016). Burnout & work disengagement implication of supervisor support in project success. *Journal of Business Strategies*, *10*(2), 37-50. Retrieved from http://www.shsu.edu/centers/cbed/journal

Harris, C., Allen, K., King, R., Ramsey, W., Kelly, C., & Thiagarajan, M. (2017). Erratum to: Sustainability in health care by allocating resources effectively (SHARE) 2: Identifying opportunities for disinvestment in a local healthcare setting. *BMC* (*BioMed Central*) *Health Services Research*, *17*(616), 1-12. doi:10.1186/s12913-017-2211-6

Hashim, M. H., Nawawi, A., & Salin, A. S. A. P. (2014). Determinants of strategic information disclosure – Malaysian evidence. *International Journal of Business and Society*, *15*, 547-572. Retrieved from http://www.ijbs.unimas.my

Henderson, J. (2015). The effect of hardiness education on hardiness and burnout on registered nurses. *Nursing Economic$*, *33*(4), 204-220. Retrieved from http://www.nursingeconomics.net

Herzberg, F., Mausner, B., & Snyderman, B. (1959). *The motivation to work*. New York, NY: Wiley

Heyvaert, M., Maes, B., & Onghena, P. (2013). Mixed methods research synthesis: Definition, framework, and potential. *Quality*, *and Quantity*, *47*, 659-676. doi:10.1007/s11135-011-9538-6

Higham, A. P., Fortune, C., & Boothman, J. D. (2016). Sustainability and investment appraisal for housing regeneration projects. *Structural Survey*, *34*, 150-167. doi:10.1108/SS-09-2015-0044

Hill, B. (2017). Does leadership style of modern matrons contribute to safer and more effective clinical services? *Nursing Management*, *24*(1), 21-25. doi:10.7748/nm.2017.e1488

Hinz, V. B., & Nickell, G. S. (2015). The prediction of workers' food safety intentions and behavior with job attitudes and the reasoned action approach. *Journal of Work and Organizational Psychology*, *31*, 91-100. doi:10.1016/.rpto.2015.03.001

Hofmeyer, A., Sheingold, B. H., & Taylor, R. (2015). Do you understand what I mean? How cognitive interviewing can strengthen valid, reliable study instruments and dissemination products. *Journal of International Education Research*, *11*, 261-267. doi.org/10.19030/jier.v11i4.9460

Holian, R., & Coghlan, D. (2013). Ethical issues and role duality in insider action research: Challenges for action research degree programmes. *Systemic Practice and Action Research*, *26*, 399-415. doi:10.1007/s11213-012-9256-6

Hom, P. W., Griffeth, R. W., & Sellaro, C. L. (1984). The validity of Mobley's (1977) model of employee turnover. *Organizational Behavior and Human Performance*, *34*, 141-174. Retrieved from http://www.sciencedirect.com/journal/organizational-behavior-and-human-performance

Hormans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology*, *63*, 597-606. doi:10.1086/222355

Hossain, M., & Zahidul Islam, K. M. (2015). Ideation through online open innovation platform: Dell IdeaStorm. *Journal of the Knowledge Economy*, *6*, 611-624. doi:10.1007/s13132-015-0262-7

Hu, Q., Schaufeli, W. B., & Taris, T. W. (2016). Extending the job demands-resources model with *guanxi* exchange. *Journal of Managerial Psychology*, *31*, 127-140. doi:10.1108/JMP-04-2013-0102

Huhtala, M., Tolvanen, A., Mauno, S., & Feldt, T. (2015). The associations between ethical organizational culture, burnout, and engagement: A multilevel study. *Journal of Business and Psychology*, *30*, 399-414. doi:10.1007/s10869-014-9369-2

Humphreys, M. (2015). Reflections on the ethics of social experimentation. *Journal of Globalization and Development*, *6*(1), 87-112. doi:10.1515/jgd-2014-0016

Humphries, N., Morgan, K., Conry, M. C., McGowan, Y., Montgomery, A., & McGee, H. (2014). Quality of care and health professional burnout: Narrative literature review. *International Journal of Health Care Quality Assurance*, *27*, 293-307. doi:10.1108/IJHCQA-08-2012-0087

Hurtado, D. A., Nelson, C. C., Hashimoto, D., & Sorensen, G. (2015). Supervisors' support for nurses' meal breaks and mental health. *Workplace Health & Safety*, *63*, 107-115. doi:10.1177/2165079915571354

Hussain, M., & Hassan, H. (2016). The leadership styles dilemma in the business world. *International Journal of Organizational Leadership*, *5*(4), 411-425. Retrieved from http://aimijournal.com

Hussain, G., Wan Ismail, W. K., Rashid, M. A., & Nisar, F. (2016). Substitutes for leadership alternative perspectives. *Management Research Review*, *39*, 546-568. doi:10.1108/MRR-03-2015-0044

Ibrahim, M. M., El-Khedr, S. M., & Nosek, L. J. (2013). Effective communication and job satisfaction among staff nurses working in pediatric intensive care units. *Life Science Journal*, *10*(1), 2661-2669. Retrieved from http://www.lifesciencesite.com/lsj

Ibrahim, S., & Sidani, S. (2014). Strategies to recruit minority persons: A systematic review. *Journal of Immigrant Minority Health*, *16*, 882-888. doi:10.1007/s10903-013-9783-y

Inabinett, J. M., & Ballaro, J. M. (2014). Developing an organization by predicting employee retention by matching corporate culture with employee's values: A correlation study. *Organization Development Journal*, *32*(1), 55-74. Retrieved from http://www.isodc.org

Ishak, N. M., & Abu Bakar, A. Y. (2014). Developing sampling frame for case study: Challenges and conditions. *World Journal of Education*, *4*(3), 29-35. doi:10.5430/wje.v4n3p29

Islam, T., Ahmed, I., & Ahmad, U. N. B. U. (2015). The influence of organizational learning culture and perceived organizational support on employees' affective commitment and turnover intention. *Nankai Business Review International*, *6* 417-431. doi:10.1108/NBRI-01-2015-0002

Jackson, M. J., & Jackson, W. T. (2015). The misuse of student evaluations of teaching: Implications, suggestions and alternatives. *Academy of Educational Leadership Journal*, *19*(3), 165-173. Retrieved from https://www.abacademies.org

James, T., Nottingham, Q., & Kim, B. C. (2013). Determining the antecedents of digital security practices in the general public dimension. *Information Technology and Management*, *14*, 69-89. doi:10.1007/s10799-012-0147-4

Janjua, Q. R., Ahmad, H. M., & Afzal, A. (2014). The impact of internal marketing and the moderating role of organizational culture on nurse job satisfaction. *Journal of Business & Economics*, *6*, 203-244. Retrieved from www.au.edu.pk/jbe

Jaseviciene, F., & Jurksaityte, D. (2014). The new capital adequacy framework (Basel III) options and issues in commercial banks of Lithuania. *Ekonomika*, *93*(4), 119-134. Retrieved from http://www.zurnalai.vu.lt

Jasti, N. V. R., & Kodali, R. (2014a). A literature review of empirical research methodology in lean manufacturing. *International Journal of Operations & Production Management*, *34*, 1080-1122. doi:10.1108/IJOPM-04-2012-0169

Jasti, N. V. R., & Kodali, R. (2014b). Validity and reliability of lean product development frameworks in Indian manufacturing industry. *Measuring Business Excellence*, *18*(4), 27-53. doi:10.1108/MBE-12-2013-0062

Javed, F., & Cheema, S. (2015). The relationship between organizational resources and work engagement: The mediating role of service climate as a predictor of performance and loyalty in shopping malls of Pakistan. *Journal of Business Studies Quarterly*, *7*(2), 11-22. Retrieved from http://jbsq.org

Jebarajakirthy, C., Lobo, A. C., & Hewege, C. (2014). Investigation determinants of youth's intentions of seeking microcredit in the post-conflict era. *Asia Pacific Journal of Marketing and Logistics*, *26*, 579-560. doi:10.1108/APJML-03-2014-0039

Jernigan, E., Beggs, J. M., & Kohut, G. F. (2016). An examination of nurses' work environment and organizational commitment. *Journal of Organizational Culture, Communications, and Conflict*, *20*(1), 112-131. Retrieved from http://www.abacademies.org

Jeve, Y. B., Oppenheimer, C., & Konje, J. (2015). Employee engagement within the NHS: A cross-sectional study. *International Journal of Health Policy and Management*, *4*, 85-90. doi:10.15171/ijhpm.2015.12

Johnston, A. (2014). Rigour in research: Theory in the research approach. *European Business Review*, *26*, 206-217. doi:10.1108/EBR-09-2013-0115

Jones, A. (2015). Organisational commitment in nurses: Is it dependent on age or education. *Nursing Management*, *21*(9), 29-36.doi:10.7748/nm.21.9.29.e1298

Jones, C. B. (2005). The cost of nurse turnover, part 2: Application of the nursing turnover cost calculation methodology. *JONA: The Journal of Nursing Administration*, *35*(1), 41-49. Retrieved from http://journals.lww.com/jonajournal/pages/default.aspx

Jones, S., Deckers, C. M., Strand, D., Bissmeyer, H., Bowman, W. J. W., & Mathe, D. G. (2017). Succession planning: Creating a case for hiring new graduates. *Nursing Economic$*, *35*(2), 64-69, 87. Retrieved from http://www.nursingeconomics.net

Jordan, P. J., Werner, A., & Venter, D. (2015). Achieving excellence in private intensive care units: The effect of transformational leadership and organisational culture on organisational change outcomes. *SA* (*South African*) *Journal of Human Resource Management*, *13*, 1-10. doi:10.4102/sajhrm.v13i1.707

Jung, S., Kim, J., & Farrish, J. (2014). In-room technology trends and their implications for enhancing guest experiences and revenue. *Journal of Hospitality and Tourism Technology*, *5*, 210-228. doi:10.1108/JHTT-11-2013-0035

Kahn, W. A. (1990). Psychological conditions of personal engagement and

disengagement at work. *Academy of Management Journal*, *33*, 692-724.

doi:10.2307/256287

Kahn, W. A. (1992). To be fully there: Psychological presence at work. *Human

Relations*, *45*, 321-349. doi:10.1177/001872679204500402

Kam, K. J., & Abdul Hamid, A. H. (2015). The true motives behind the adoption of

QLASSIC-CIS 7: 2006. *International Journal of Quality & Reliability

Management*, *32*, 603-616. doi:10.1108/IJQRM-07-2013-0108

Karanika-Murray, M., Duncan, N., Pontes, H. M., & Griffiths, M. D. (2015).

Organizational identification, work engagement, and job satisfaction. *Journal of

Managerial Psychology*, *30*, 1019-1033. doi:10.1108/JMP-11-2013-0359

Karimi, L., Leggat, S. G., Donohue, L., Bartram, T., & Oakman, J. (2017). Are

organisational factors affecting the emotional withdrawal of community nurses?

Australian Health Review, *41*, 359-364. doi:10.1071/AH16027

Karlsen, J. E. (2014). Design and application for a replicable foresight methodology

bridging quantitative and qualitative expert data. *European Journal of Futures

Research*, *2*(1), 1-12. doi:10.1007/s40309-014-0040-y

Kassim, A., Anwar, K., Arokiasamy, L., Md Isa, M. H. M., & Ping, C. H. (2017).

Intention to purchase safer car: An application of theory of planned behavior.

Global Business and Management Research: An International Journal, *9*, 188-

197. Retrieved from http://www.gbmr.ioksp.com

Kataria, A., Rastogi, R., & Garg, P. (2013). Organizational effectiveness as a function of employee engagement. *South Asian Journal of Management*, *20*(4), 56-73. Retrieved from http://www.sajm-amdisa.org

Katz, D., & Kahn, R. L. (1966). *The social psychology of organizations*. Hoboken, NJ: Wiley.

Kianto, A., Vanhala, M., & Heilmann, P. (2016). The impact of knowledge management on job satisfaction. *Journal of Knowledge Management*, *20*, 621-636. doi:10.1108/JKM-10-2015-0398

Kim, H.-Y. (2014). Analysis of variance (ANOVA) comparing means of more than two groups. *Restorative Dentistry & Endodontics*, *39*, 74-77. doi:10.5395/rde.2014.39.1.74

Kim, Y., & Cho, Y. C. (2016). Impact of retirement system on job satisfaction and loyalty: A case of the salary peak system. *International Business & Economics Research Journal*, *15*, 27-39. Retrieved from http://www.cluteinstitute.com

Kim, Y. W., & Ko, J. (2014). HR practices and knowledge sharing behavior: Focusing on the moderating effect of trust in supervisor. *Public Personnel Management*, *43*, 586-607. doi:10.1177/0081026014542342

Kim, S., Um, K., Kim, H. Y., & Kim, Y. (2016). Hospital career management systems and their effects on the psychological state and career attitudes of nurses. *Service Business*, *10*, 87-112. doi:10.1007/s11628-014-0257-7

Kirankabes, M. C., & Arik, M. (2014). Industrial clustering approach in regional development: The case of Turkey. *Journal of Applied Business and Economics*, *16*(3), 135-151. Retrieved from http://www.na-businesspress.com/jabeopen

Ko, C.-H., & Jeng, S.-N. (2016). Exploring the effects of emotional labor in the hotel industry. *International Journal of Organizational Innovation*, *9*(2), 158-167. Retrieved from http://www.ijoi-online.org

Ko, C.-H., Pei, L., & Tsai, Y.-H. (2016). A study of employees' perception of information technology adoption in hotels. *International Journal of Organizational Innovation*, *8*(3), 231-238. Retrieved from http://www.ijoi-online.org

Koçak, Ö. E. (2016). How to enable thriving at work through organizational trust. *International Journal of Research in Business and Social Science*, *5*(4), 40-52. doi:10.20525/ijrbs.v5i4.580

Koçoğlu, M. (2014). Cynicism as a mediator of relations between job stress and work alienation: A study from a developing country - Turkey. *Global Business and Management Research: An International Journal*, *6*, 24-36. Retrieved from http://www.gbmr.ioksp.com

Koning, C. (2014). Does self-scheduling increase nurses' job satisfaction? An integrative literature review. *Nursing Management*, *21(*6), 24-28. Retrieved from http://journals.rcni.com/toc/nm/21/6

Kovacs, W., Weisenthal, S., Folio, L., Li, Q., Summers, R. M., & Yao, J. (2016). Retrieval, visualization, and mining of large radiation dosage data. *Information Retrieva*l *Journal*, *19*, 38-58. doi:10.1007/s10791-015-9265-z

Kujala, J., Lehtimäki, H., & Puctait, R. (2016). Trust and distrust constructing unity and fragmentation of organisational culture. *Journal of Business Ethics*, *139*, 701-716. doi:10.1007/s10551-015-2915-7

Kulikowski, K. (2017). Do we all agree on how to measure work engagement? Factorial validity of Utrecht Work Engagement Scale as a standard measurement tool- A literature review. *International Journal of Occupational Medicine and Environmental Health*. *30*, 161-175. doi:10.13075/ijomeh1896.00947

Kumari, S. S. M. N., & De Alwis, A. C. (2015). The nursing shortage impact on job outcome (the case in Sri Lanka). *Journal of Competitiveness*, *7*(3), 75-94. doi:10.7441/joc.2015.03.06

Kurnat-Thoma, E., Ganger, M., Peterson, K., & Channell, L. (2017). Reducing annual hospital and registered nurse staff turnover—A 10-element on boarding program intervention. *SAGE Open Nursing*, *3*, 1-13. doi:10.1177/2377960817697712

Kundu, G. K., & Bairi, J. (2014). A scale for measuring the applicability of lean practices in IT support services. *Journal of Enterprise Information Management*, *27*, 623-643. doi:10.1108/JEIM-02-2013-0005

Kwantes, C. J., & Prasad, L. (2014). Test and extension of multiple foci/multiple components of workplace commitment in a hospital in India. *Vision*, *18*, 165-174. doi:10.1177/0972262914538364

Lach, D. (2014). Challenges of interdisciplinary research: Reconciling qualitative and quantitative methods for understanding human-landscape systems. *Environmental Management*, *53*, 88-93. doi:10.1007/s00267-013-0115-8

Lacy, S., Watson, B. R., & Riffe, D. (2015). Issues and best practices in content analysis. *Journalism & Mass Communication Quarterly*, *92*, 1-21. doi:10.1177/1077699015607338

Lam, M., O'Donnell, M., & Robertson, D. (2015). Achieving employee commitment for

    continuous improvement initiatives. *International Journal of Operations &*

    Production Management, *35*, 201-215. doi:10.1108/IJOPM-03-2013-0134

Lee, A. S., & Baskerville, R. L. (2003). Generalizing generalizability in information

    systems research. *Information Systems Research*, *14*, 221-243. Retrieved from

    http://pubsonline.informs.org/journal/isre

Lee, Z. W.-Y., & Cheung, C. M.-K. (2014). Problematic use of social networking sites:

    The role of self-esteem. *International Journal of Business and Information*, *9*,

    143-159. Retrieved from http://ijbi.org

Lee, S., Shin, Y., & Baek, S. I. (2017). The impact of job demands and resources on job

    crafting. *Journal of Applied Business Research*, *33*, 829-842.

    doi:10.19030/jabr.v33i4.10003

Lee, H.-F., Yen, M., Fetzer, S., & Chien, T. W. (2015). Predictors of burnout among

    nurses in Taiwan. *Community Mental Health Journal*, *51*, 733-737.

    doi:10.1007/s10597-014-9818-4

Lehmann, S., & Bengart, P. (2016). Replications hardly possible reporting practice in

    top-tier marketing journals. Replications hardly possible: Reporting practice in

    top-tier marketing journals. *Journal of Modelling in Management*, *11*, 427-445.

    doi:10.1108/JM2-04-2014-0030

Leider, J. P., Harper, E., Shon, J. W., Sellers, K., & Castrucci, B. C. (2016). Job

    satisfaction and expected turnover among federal, state, and local public health

    practitioners. *American Journal of Public Health*, *106*, 1782-1788.

    doi:10.2105/AJPH.2016.303305

Li, Y., & Jones, C. B. (2013). A literature review of nursing turnover costs. *Journal of Nursing Management*, *21*, 405-418. doi:10.1111/j.1365-284.2012.01411

Li, L., Ai, H., Gao, L., Zhou, H., Liu, X., Zhang, Z., … Fan, L. (2017). Moderating effects of coping on work stress and job performance for nurses in tertiary hospitals: A cross-sectional survey in China. *BMC (BioMed Central) Health Service Research*, *17*(401), 1-8. doi:10.1186/s12913-017-2348-3

Linh, N. T. T., Jin, T. C., Kiong, T. P., & Fah, B. C. Y. (2016). Work–family conflict and employee job satisfaction: A comparison of state-owned and foreign-invested enterprises in Vietnam. *Journal of Asian Business Strategy*, *6*(4), 63-72. Retrieved from http://www.aessweb.com

Linz, S., Good, L. K., & Busch, M. (2015). Promoting worker loyalty and empirical analysis. *International Journal of Manpower*, *36*, 169-191. doi:10.1108/IJM-06-2013-0129

Litwin, J. (2016). Engagement shift: Informed consent in the digital era. *Applied Clinical Trials*, *25*(6), 26-32. Retrieved from http://www.appliedclinicaltrialonsline.com

Liu, F., Zhao, X., Chau, P. Y. K., & Tang, Q. (2015). Roles of perceived value and individual differences in the acceptance of mobile coupon applications. *Internet Research*, 25, 471-495. doi:10.1108/IntR-02-2014-0053

Lober, M., & Savič, B. S. (2012). Job satisfaction of nurses and identifying factors of job satisfaction in Slovenian hospitals. *Croatian Medical Journal*, *53*, 263-270. doi:10.3325/cmj.2012.53.263

Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297-1343). Chicago, IL: Rand McNally.

Longo, Y., Gunz, A., Curtis, G. J., & Farsides, T. (2016). Measuring need satisfaction and frustration in educational and work contexts: The need satisfaction and frustration scale (NSFS). *Journal of Happiness Studies*, *17*, 295-317. doi:10.1007/s10902-014-9595-3

Lopes, A. G. (2016). Using research methods in human computer interaction to design technology for resilience. *Journal of Information Systems and Technology Management: JISTEM*, *13*, 363-388. doi:10.4301/S1807-17752016000300001

Lu, L., Lu, A. C. S., Gursoy, D., & Neale, N. R. (2016). Work engagement, job satisfaction, and turnover intentions: A comparison between supervisors and line-level employees. *International Journal of Hospitality Management*, *28*, 737-761. doi:10.1108/IJCHM-07-2014-0360

MacPhee, M., Dahinten, V. S., & Havaei, F. (2017). The impact of heavy perceived nurse workloads on patient and nurse outcomes. *Administrative Sciences*, *7*, 1-17. doi:10.3390/admsci7010007

MacVane Phipps, F. (2015). Clinical governance review 20.2. *Clinical Governance*: *An International Journal*, *20*, 101-104. doi:10.1108/CGIJ-06-2015-0017

Madden, L., Mathias, B. D., & Madden, T. M. (2015). In good company: The impact of perceived organizational support and positive relationships at work on turnover intentions. *Management Research Review*, *38*, 242-263. doi:10.1108/MRR-09-2013-0228

Malak, N. (2017). Nurse absenteeism and benefit generosity: Evidence from Canada. *Journal of Health and Human Services Administration*, *40*, 44-78. Retrieved from https://jhhsa.spaef.org

Malesios, C. C., & Psarakis, S. (2014). Comparison of the h-index for different fields of research using bootstrap methodology. *Quality and Quantity*, *48*, 521-545. doi:10.1007/s11135-012-9785-1

Malik, S. Z., & Khalid, N. (2016). Psychological contract breach, work engagement and turnover intention: Evidence from banking industry in Pakistan. *Pakistan Economic and Social Review*, *54*, 37-54. Retrieved from pu.edu.pk

Malik, M., Wan, D., Ahmad, M. I., Naseem, M. A., & Rehman, R. U. (2015). The role of LMX in employee job motivation, satisfaction, empowerment, stress, and turnover: Cross country analysis. *Journal of Applied Business Research*, *31*, 1987-2000. Retrieved from http://www.cluteinstitute.com

Malloch, K. (2015). Measurement of nursing's complex health care work: Evolution of the science for determining the required staffing for safe and effective patient care. *Nursing Economic$*, *33*(1), 20-25. Retrieved from http://www.nursingeconomics.net

Mani, D., Kim-Kwang, R. C., & Mubarak, S. (2014). Information security in the South Australian real estate industry: A study of 40 real estate organizations. *Information Management & Computer Security*, *22*, 24-41. doi:10.1108/IMCS-10-2012-0060

Maqbali, M. A. A. (2015). Factors that influence nurses' job satisfaction: A literature review. *Nursing Management*, *22*(2), 30-37. doi:10.7748/nm.22.230.e129

Marasi, S., Cox, S. S., & Bennett, R. J. (2016). Job embeddedness: Is it always a good thing? *Journal of Managerial Psychology*, *31*, 141-153. doi:10.1108/JMP-05-2013-0150

Markey, R., Ravenswood, K., & Webber, D. J. (2015). Quality of work environment and quitting intention: A dilemma. *New Zealand Journal of Employment Relations*, *40*(1), 35-52. Retrieved from http://www.nzjournal.org

Martin, D. M. (2015). Nurse fatigue and shift length: A pilot study. *Nursing Economic$*, *33*(2), 81-87. Retrieved from http://www.nursingeconomics.net

Martin, W. E., & Bridgmon, K. D. (2012). *Quantitative and statistical research methods: From hypothesis to results*. San Francisco, CA: Jossey-Bass.

Mascherek, A. C., Gehring, K., Bezzola, P., & Schwappach, D. L. B. (2015). Using the theory of planned behaviour to model antecedents of surgical checklist use: A cross-sectional study. *BMC* (*BioMed Central*) *Health Services Researcher*, *15*(71), 1-9. doi:10.1186/s12913-015-1122-7

Maslach, C., & Leiter, M. P. (1997). *The truth about burnout*. San Francisco, CA: Jossey-Bass.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*, 370-396. Retrieved from http://www.apa.org

Mass-Hebner, K., Harte, M. J., Molina, N., Hughes, R. M., Schreck, C., & Yeakley, J. A. (2015). Combining and aggregating environmental data for status and trend assessments: Challenges and approaches. *Environmental Monitoring and Assessment*, *187*, 1-16. doi:10.1007/s10661-015-4504-8

Mathieu, C., Fabi, B., Lacoursière, R., & Raymond, L. (2016). The role of supervisory

    behavior, job satisfaction and organizational commitment on employee turnover.

    Journal of Management and Organization, *22*, 113-129. doi:10.1017/jmo.2015.25

Matta, F. K., Scott, B. A., Koopman, J., & Conlon, D. E. (2015). Does seeing "eye to

    eye" affect work engagement and organizational citizenship behavior? A role

    theory perspective on LMX agreement. *Academy of Management Journal*, *58*,

    1686-1708. doi:10.5465/amj.2014.0106

Maurits, E. E. M., de Veer, A. J. E., van der Hoek, L. S., & Francke, A. L. (2015).

    Factors associated with the self-perceived ability of nursing staff to remain

    working until retirement: A questionnaire survey. *BMC (BioMed Central) Health*

    Services Research, *15*(395), 1-11. doi:10.1186/s12913-015-1006-x.

Mazurenko, O., Gupte, G., & Shan, G. (2015). Analyzing U.S. nurse turnover: Are nurses

    leaving their jobs or the profession itself? *Journal of Hospital Administration*,

    4(4), 48-56. Retrieved from http://www.sciedu.ca/jha

Mazzetti, G., Schaufeli, W. B., Guglielmi, D., & Depolo, M. (2016). Overwork climate

    scale: Psychometric properties and relationships with working hard. *Journal of*

    Managerial Psychology, *31*, 880-896. doi:10.1108/JMP-03-2014-0100

McClung, S., & Rynarzewska, A. I. (2015). Purchase intention behind Mercer

    University's inaugural football team. *International Review on Public and Non -*

    Profit Marketing, *12*, 155-167. doi:10.1007/s12208-015-0130-y

McCutcheon, L. E., Aruguete, M. S., McKelvie, S. J., Jenkins, W., Williams, J. L., McCarley, N., … Shaughnessy, M. F. (2016). How questionable are predatory social science journal? *North American Journal of Psychology*, *18*, 427-440. Retrieved from http://www.najp.us

McDonald, J., & Léveillé, V. (2014). Whither the retention schedule in the era of big data and open data? *Records Management Journal*, *24*, 99-121. doi:10.1108/RMJ-01-2014-0010

McElroy, L. M., & Ladner, D. P. (2014). Defining the study cohort: Inclusion and exclusion criteria. In T. M. Pawlik & J. A. Sosa (Eds.), *Success in academic surgery: Clinical trials* (pp. 131-139). New York, NY: Springer

Mcleod, M. S., Payne, G. T., & Evert, R. E. (2016). Organizational ethics research: A systematic review of methods and analytical techniques. *Journal of Business Ethics*, *134*, 429-443. doi:10.1007/s10551-014-2436-9

McMenamin, P. (2014). New BLS data on staff nurse compensation and inflation adjusted wages. *Nursing Economic$*, *32*(6), 320-322. Retrieved from http://www.nursingeconomics.net

Memarzadeh, F., Blum, S. C., & Adams, C. (2015). The impact of positive and negative e-comments on business travelers' intention to purchase a hotel room. *Journal of Hospitality and Tourism Technology*, *6*, 258-270. doi:10.1108/JHTT-09-2014-0049

Mensik, J., & Nickitas, D. M. (2015). Why nurse staffing matters: A moral imperative. *Nursing Economic$*, *33*(3), 186-187. Retrieved from http://www.nursingeconomics.net

Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of
organizational commitment. *Human Resource Management Review*, *1*, 61-89.
doi:10.1016/1053-4822(91)90011-Z

Mikesell, L., Bromley, E., & Khodyakov, D. (2013). Ethical community-engage research:
A literature review. *American Journal of Public Health*, *103*, e7-e14, Retrieved
from http://www.ajph.aphapublications.org

Mishra, S., & Kumar, P. (2017). Exploring the Nexus between psychological contract and
turnover intention: Conceptual framework. *Romanian Economic and Business
Review*, *12*(1), 68-81. Retrieved from http://www.rebe.ro

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

Mobley, W. H. (1982). *Employee turnover, causes, consequences, and control*. Reading,
MA: Addison-Wesley.

Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of
precursors of hospital employee turnover. *Journal of Applied Psychology*, *63*,
408-414. doi:10.1037/0021-9010.63.4.408

Mohamed, A. A., Mohamad, M. S., & Awad, A. E. (2017). The relationship between pay
satisfaction and turnover intention in Egypt. *Journal of Competitiveness Studies*,
25, 65-79. Retrieved from http://www.eberly.iup.edu/ASCWeb/journals_jcs.html

Mohammad Mosadeghrad, A. (2014). Occupational stress and its consequences.
Leadership in Health Services, *27*, 224-239. doi:10.1108/LHS-07-2013-0032

Mohd Amir, A. (2014). Performance measurement system design in service operations. *Management Research Review*, *37*, 728-749. doi:10.1108/MRR-02-2013-0046

Molenaar, D. (2015). Heteroscedastic latent trait models for dichotomous data. *Psychometrika*, *80*, 625-644. doi:10.1007/s11336-014-9406-0

Molina-Azorin, J. (2016). Mixed methods research: An opportunity to improve our studies and our research skills. *European Journal of Management and Business Economics*, *25*, 37-38. doi:10.1016/j.redeen.2016.05.001

Momanyi, N. B., & Kaimenyi, C. K. (2015). An investigation into factors causing high nurse turnover in mission hospitals in Kenya: A case for Pcea Chogoria hospital. *International Journal of Academic Research in Business and Social Sciences*, *5*(3), 55-86. doi:10.6007/IJARBSS/v5-i3/1499

Morrison, R. G., & Hoover, D. J. (2013). An instrument useful to determine localized social network usage among organizations: A pilot study. *Advances in Management*, *6*, 25-33. Retrieved from http://www.emeraldinsight.com/journal/jamr

Morrison, R., & Macky, K. (2015). Employee social liability – More than just low social capital within the workplace. *New Zealand Journal of Employment Relations*, *40*(3), 67-89. Retrieved from http://www.nzjournal.org

Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. *Academy of Management Review*, *22*, 226-256. Retrieved from http://www.aom.org/amr

Moy, P., & Murphy, J. (2016). Problems and prospects in survey research. *Journalism & Mass Communication Quarterly*, *93*, 16-37. doi:10.1177/1077699016631108

Mullen, K. (2015). Barriers to work-life balance for hospital nurses. *Workplace Health & Safety*, *63*, 96-99. doi:10.1177/2165079914565355

Mushonga, S. M. (2016). It's all in the treatment: An empirical study of fairness perceptions in the workplace. *Journal of Organizational Psychology*, *16*(2), 63-74. Retrieved from http://www.na-businesspress.com/jopopen.html

Mutale, W., Bond, V., Mwanamwenge, M. T., Mlewa, S., Balabanova, D., Spicer, N., & Ayles, H. (2013). Systems thinking in practice: The current status of the six WHO building blocks for health system strengthening in three BHOMA intervention districts of Zambia: A baseline qualitative study. *BMC* (*BioMed Central*) *Health Services Research*, *13*(291), 1-9. doi:10.1186/1472-6963-13-291

Muzumdar, P. (2014). A linear regression approach for evaluating the decline in chartered designations with the effect of economic determinants. *Journal of Contemporary Research in Management*, *9*(3), 13-20. Retrieved from http://www.psgim.ac.in/journals/index.php/jcrm

Namagembe, S., Sridharan, R., & Ryan, S. (2016). Green supply chain management practice adoption in Ugandan SME manufacturing firms. *World Journal of Science, Technology and Sustainable Development*, *13*, 154-173. doi:10.1108/WJSTSD-01-2016-0003

Nazir, S., Shafi, A., Qun, W., Nazir, N., & Tran, Q. D. (2016) Influence of organizational rewards on organizational commitment and turnover intentions. *Employee Relations*, *38*, 596-619. doi:10.1108/ER-12-2014-0150

Needleman, J. (2015). Nurse staffing: The knowns and unknowns. *Nursing Economic$*, *33*(1), 5-7. Retrieved from http://www.nursingeconomics.net

Negussie, N., & Demissie, A. (2013). Relationship between leadership style of nurse

    managers and nurses' job satisfaction in Jima University Specialized Hospital.

    Ethiopian Journal of Health Sciences, *23*, 49-58. Retrieved from

    http://ejhs.ju.edu.et.

Nelson, A. M. (2016). Methodology for examining attributes of African Americans in the

    Department of Defense Senior Executive Service Corp. *Journal of Economic*

    Development, Management, *IT*, *Finance*, *and Marketing*, *8*(1), 48-68. Retrieved

    from http://www.gsmi-ijgb.com/Pages/Journals/aspx

Newman, A., Nielsen, I., Smyth, R., & Hooke, A. (2015). Examining the relationship

    between workplace support and life satisfaction: The mediating role of job

    satisfaction. *Social Indicators Research*, *120*, 769-781. doi:10.1007/s11205-014-

    0613-y

Newton, C., Teo, S. T. T., Pick, D., Ho, M., & Thomas, D. (2016). Emotional intelligence

    as a buffer of occupational stress. *Personnel Review*, *45*, 1010-1028.

    doi:10.1108/PR-11-2014-0271

Nithya, R. (2016). A study on work-family conflict among women nurses in hospitals -

    an Indian perspective. *International Journal on Global Business Management &*

    Research, *5*(2), 94-104. Retrieved from http://www.rajalakshmi.org/ijgbmr

Nitu-Antonie, R., & Feder, E. (2015). The role of economic academic education on

    entrepreneurial behavior. *Amfiteatru Economic*, *17*, 261-276. Retrieved from

    http://www.amfiteatrueconomic.ro

Nørreklit, H., Nørreklit, L., & Mitchell, F. (2016). Understanding practice generalisation
- opening the research/practice gap. *Qualitative Research in Accounting and
Management*, *13*, 278-302. doi:10.1108/QRAM-09-2015-008

Nowrouzi, B., Lightfoot, N., Larivière, M., Carter, L., Rukholm, E., Schinke, R., &
Belanger-Gardner, D. (2015). Occupational stress management and burnout
interventions in nursing and their implications for healthy work environments: A
literature review. *Workplace Health & Safety*, *6*, 308-315.
doi:1177/2165079915576931

Nzuza, Z. W., & Lekhanya, L. M. (2014). Critical internal factors influencing the
centralization of stock procurement processes in a South African municipality.
International Business & Economics Research Journal, *13*, 1341-1352.
doi:10.19030/iber.v13i6.8949

O'Keefe, L. C., Brown, K. C., & Christian, B. J. (2014). Policy perspectives on
occupational stress. *Workplace Health & Safety*, *62*, 432-438.
doi:10.3928/21650799-20140813-02

Omair, A. (2014). Sample size estimation and sampling techniques for selecting a
representative sample. *Journal of Health Specialties*, *2*(4), 142-147.
doi:10.4103/1658-600X.142783

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

Orcher, L. T. (2014). *Conducting research: Social and behavioral methods* (2nd ed.).
Glendale, CA: Pyrczak.

Orhan, M. A., Rijsman, J. B., & Van Dijk, G. M. (2016). Invisible, therefore isolated: Comparative effects of team virtuality with task virtuality on workplace isolation and work outcomes. *Revista De Psicología Del Trabajo y De Las Organizaciones*, *32*(2), 109-122. doi:10.1016/j.rpto.2016.02.002

Oro, S. R., Neto, A. C., Mafioleti, T. R., Garcia, S. R. P., & Júnior, C. N. (2016). Multivariate analysis of the displacement of a concrete dam with respect to the action of environmental conditions. *Independent Journal of Management & Production*, *7*, 526-545. doi:10.14807/ijmp.v7i2.413

Osborne, J. W. (2013). *Data cleaning basics: Best practices in dealing with extreme scores*. Thousand Oaks, CA: Sage.

Ostermeier, K., & Camp, K. M. (2016). An exploratory investigation of negative perceptions of the affordable care act among patient-facing professionals and intentions to leave. *Journal of Applied Management and Entrepreneurship*, *21*(2), 95-112. doi:10.9774/GLEAF.3709.2016.ap.00007

Parra-Frutos, I. (2013). Testing homogeneity of variances with unequal sample sizes. *Computational Statistics*, *28*, 1269-1297.doi:10.1007/s00180-012-0353-x

Patrick, H. A., & Mukherjee, U. (2018). Work engagement: A cross-sectional study of employees in the healthcare sector. *Journal of Contemporary Management Research*, *12*(1), 60-79. Retrieved from http://www.psgim.ac.in/journals/index.php/jcrm

Pattison, J., & Kline, T. (2015). Facilitating a just and trusting culture. *International Journal of Health*, *28*, 11-26. doi:10.1108/IJHCQA-05-2013-0055

Peng, J., & Lin, J. (2016). Linking supervisor feedback environment to contextual performances. *Leadership & Organization Development Journal*, *37*, 802-820. doi:10.1108/LODJ-110-2014-0207

Penoyer, D. A., Cortelyou-Ward, K., Noblin, A. M., Bullard, T., Talbert, S., Wilson, J., … Shaw, G. (2014). Use of electronic health record documentation by healthcare workers in an acute care hospital system/Practitioner Application. *Journal of Healthcare Management*, *59*, 130-144. Retrieved from https://ache.org

Perneger, T. V., Courvoisier, D. S., Hudelson, P. M., & Gayet-Ageron, A. (2015). Sample size for pre-tests of questionnaires. *Quality of Life Research*, *24*(1), 147-151. doi:10.1007/s11136-014-0752-2

Petersen, J. S., Allman, P. H., & Lee, W. C. (2015). Surveys in class action wage and hour cases and the use of anonymous participants. *Journal of Legal Economics*, *22*(1), 25-38. Retrieved from http://aaefe.org

Pfahler, L. B., & Vukovinsky, K. E. (2014). The role of normal data distribution in pharmaceutical development and manufacturing. *Pharmaceutical Technology Europe*, *26*(10), 34-36, 38, 40, 42. Retrieved from http://www.pharmtech.com

Phua, K.-L., & Hue, J.-W. (2015). The impact of prolonged economic downturns and economic crises on the nursing profession. *Nursing Economic$*, *33*(4), 227-232. Retrieved from http://www.nursingeconomics.net/cgi-

Podsakoff, P. M., Todor, W. D., & Skov, R. (1982). Effects of leader contingent and noncontingent reward and punishment behaviors on subordinate performance and satisfaction. *Academy of Management Journal*, *25*, 810-821. Retrieved from https://www.jstor.org

Poortman, C. L., & Schildkamp, K. (2012). Alternative quality standards in qualitative research? *Quality and Quantity*, *46*, 1727-1751. doi:10.1007/s11135-011-9555-5

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*, 879-891. doi:10.3758/BRM.40.3.879

Radstaak, M., & Hennes, A. (2017). Leader-member exchange fosters work engagement: The mediating role of job crafting. *SA Journal of Industrial Psychology*, *43*, 1-11. doi:10.4102/sajip.v43i0.1458

Rahman, M. S., Osmangani, A. M., Daud, N. M., Chowdhury, A. H., & Hassan, H. (2015). Trust and work place spirituality on knowledge sharing behavior. *Learning Organization*, *22*, 317-332. doi:10.1108/TLO-05-2015-0032

Rajan, D. (2015). Stress and job performance: Among nurses. *SCMS* (*School of Communication and Management Studies*) *Journal of Indian Management*, *12*(1), 66-87. Retrieved from https://www.scms.edu.in/journal

Rana, S., Ardichvili, A., & Tkachenko, O. (2014). A theoretical model of the antecedents and outcomes of employee engagement. *Journal of Workplace Learning*, *26*, 249-266. doi:10.1108/JWL-09-2013-0063

Rao, A. N., & Pearce, J. L. (2016). Should management practice adapt to cultural values? The evidence against power distance adaption. *Cross Cultural & Strategic Management, 23*, 257-286. doi:10.1108/CCSM-03-2014-0035

Rea, L. M., & Parker, R. A. (2014). *Designing and conducting survey research: A comprehensive guide* (4th ed.). San Francisco, CA: Jossey-Bass.

Reio, T. G., Jr. (2016). Nonexperimental research: Strengths, weaknesses and issues of precision. *European Journal of Training and Development*, *40*(8/9), 676-690. doi:10.1108/EJTD-07-2015-0058

Reuben, G., Chiba, M., & Scheepers, C. B. (2017). An investigation into the effect of leadership style on stress-related presenteeism in South African knowledge workers. *SA* (*South African*) *Journal of Human Resource Management*, *15*, 1-13. doi:10.4102/sajhrm.v15i0.754

Rezghi Rostami, A., Valmohammadi, C., & Yousefpoor, J. (2014). The relationship between customer satisfaction and customer relationship management system; A case study of Ghavamin bank. *Industrial and Commercial Training*, *46*, 220-227. doi:10.1108/ICT-10-2013-0067

Richards, K. (2016). The urgency of creating a culture of caring: Start with you! *Nursing Economic$*, *34*(3), 152-155. Retrieved from http://www.nursingeconomics.net

Riedl, R., Davis, F. D., & Heyner, A. R. (2014). Toward a NeuroIS research methodology: Intensifying the discussion on methods, tools, and measurement. *Journal of the Association for Information System*, *15*(10), 35-69. Retrieved from http://aisel.aisnet.org

Riva, S., Gorini, A., Cutica, I., Mazzocco, K., & Pravettoni, G. (2015). Translation, cross-cultural adaptation, and reliability, of the Italian version of the passive risk taking (PRT) scale. *Judgment and Decision Making*, *10*, 597-604. Retrieved from https://journal.sjdm.org

Robson, A., & Robson, F. (2016). Investigation of nurses' intention to leave: A study of a sample of UK nurses. *Journal of Health Organization and Management*, *30*(1), 154-173. doi:10.1108/JHOM-05-2013-0100

Rodwell, J., & Gulyas, A. (2015). Psychological contract breach among allied health professionals: Fairness, individual differences and an aggravated breach effect. *Journal of Health Organization and Management*, *29*, 393-412. doi:10.1108/JHOM-05-2013-0107

Rodwell, J., Ellershaw, J., & Flower, R. (2015). Fulfill psychological contract promises to manage in-demand employees. *Personnel Review*, *44*, 689-701. doi:10.1108/PR-12-2013-0224

Romeo, L. D., & Lee, Y.-A. (2015). Exploring apparel purchase issues with plus-size female teens. *Journal of Fashion Marketing and Management: An International Journal*, *19*, 120-135. doi:10.1108/JFMM-02-2014-0012

Roof, R. A. (2015). The association of individual spirituality on employee engagement: The spirit at work. *Journal of Business Ethics*, *13*0, 585-599. doi:10.1007/s10551-014-2246-0

Roper, K. O., Sedehi, A., & Ashuri, B. (2015). A cost-benefit case for RFID implementation in hospitals: Adapting to industry reform. *Facilities*, *33*, 367-388. doi:10.1108/F-05-2013-0041

Rosha, A., & Lobanova, L. (2014). Rízení vyzkumného nástroje pro identifikaci

    podmínek, které v organizacích podporují koucing/Piloting the research

    instrument to identify the conditions that promote coaching in organisations.

    Trendy Ekonomiky a Managementu, *8*(21), 43-53. Retrieved from

    https://trendy.fbm.vutbr.cz

Rossoni, L., Engelbert, R., & Bellegard, N. L. (2016). Normal science and its tools:

    Reviewing the effects of exploratory factor analysis in management/Ciência

    normal e suas ferramentas: Revisando os efeitos dos métodos de análise fatorial

    exploratória em administração. *Revista De Administração*, *51*, 198-211.

    doi:10.5700/rausp1234

Roster, C. A., Albaum, G., & Smith, S. M. (2017). Effect of topic sensitivity on online

    survey panelists' motivation and data quality. *Journal of Marketing Theory and*

    Practice, *25*(1), 1-16. doi:10.1080/10696679.2016.1205449

Roter, A. B. (2016). A phenomenological study: Understanding registered nurses

    experiences related to dysfunctional leadership in a hospital setting. *Journal of*

    Organizational Psychology, *16*(1), 57-70. Retrieved from http://www.na-

    businesspress.com

Roulin, N., Mayor, E., & Bangerter, A. (2014). How to satisfy and retain personnel

    despite job-market shortage: Multilevel predictors of nurses' job satisfaction and

    intent to leave. *Swiss Journal of Psychology*, *73*, 13-24. doi:10.1024/1421-

    0185/a000123

Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee*

    Responsibilities and Rights Journal, *2*, 121-139. doi:10.1007/BF01384942

Rowley, J. (2014). Designing and using research questionnaires. *Management Research Review*, *37*, 308-330. doi:10.1108/MRR-02-2013-0027

Rozman, M., Treven, S., Cancer, V., & Cingula, M. (2017). Burnout of older and younger employees – The case of Slovenia. *Organizacija*, *50*, 47-62. doi:10.1515/orga-2017-0005

Rubinstein, I. S., & Hartzog, W. (2016). Anonymization and risk. *Washington Law Review*, *91*, 703-760. Retrieved from https://www.law.uw.edu/wir

Ruihley, B. J., & Hardin, R. (2014). Sport fans and online data collection: Challenges and ethics. *Journal of Applied Sports Management*, *6*(3), 1-16. Retrieved from http://js.sagamorepub.com/jasm

Sadeghniiat-Haghighi, K., & Yazdi, Z. (2015). Fatigue management in the workplace. *Industrial Psychiatry Journal*, *24*(1), 12-17. doi:10.4103/0972-6748.160915

Sadri, S. (2013). An exposition of research methodology in management and social sciences. *Journal of Economic Development, Environment and People*, *2*(3), 5-24. Retrieved from jedep.spiruharet.ro

Saiti, A., & Papadopoulos, Y. (2015). School teachers' job satisfaction and personal characteristics: A quantitative research study in Greece. *International Journal of Educational Management*, *29*, 73-97. doi:10.1108/IJEM-05-2013-0081

Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, *21*, 600-619. doi:10.1108/02683940610690169

Salem, O. A., Baddar, F. M., & AL-Mugatti, H. M. (2016). Relationship between nurse job satisfaction and organizational commitment. *IOSR Journal of Nursing and Health Science* (*IOSR-JNHS*), *5*(1), 49-55. doi:10.9790/1959-05114955

Salilih, S. Z., & Abajobir, A. A. (2014). Work-related stress and associated factors among nurses working in public hospitals of Addis Ababa, Ethiopia: a cross-sectional study. *Workplace Health Safety*, *62*, 326-332. doi:10.3928/21650799-20140708-02

Samad, A., Reaburn, P., & Ahmed, E. (2015). An investigation of work-life conflict in regional Australia: Empirical evidence from an Australian regional university. *Journal of Developing Areas*, *49*, 355-366. doi:10.1353/jda.2015.0131

Sargent, R. G. (2015). An interval statistical procedure for use in validation of simulation models. *Journal of Simulation*. *7*(1), 12-24. doi:10.1057/jos.2012.20

Sarma, S. K. (2015). Qualitative research: Examining the misconceptions. *South Asian Journal of Management*, *22*(3), 176-191. Retrieved from http://www.sajm-amdisa.org

Schapp, P., & Kekana, E. (2016). The structural validity of the experience of Work and Life Circumstances Questionnaire (WLQ). *SA* (*South African*) *Journal of Industrial Psychology*, *42*(1), 1-16. doi:10.4102/sajip.v42i1.1349

Schaufeli, W. B. (2013). What is engagement? In C. Truss, K. Alfes, R. Delbridge, A. Shantz, & E. Soane. (Eds.), *Employee Engagement in theory and practice* (pp. 15-35). London: Routledge.

Schaufeli, W. B., & Bakker, A. B. (2004a). *UWES – Work Engagement Scale: Test manual* (Unpublished manuscript). Department of Psychology, Utrecht University. Retrieved from http://www.wilmarschaufeli.nl

Schaufeli, W. B., & Bakker, A. B. (2004b). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, *25*, 293-315. doi:10.1002/job.248

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, *66*, 701-716. doi:10.1177/0013164405282471

Schaufeli, W. B., & Maslach, C., & Marek, T. (2017). *Professional burnout: Recent developments in theory and research*. Routledge: New York, NY.

Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two-sample confirmatory factor analytic approach. *Journal of Happiness Studies*, *3*, 71-92. doi:10.1023/A:1015630930326

Schaufeli, W. B., Taris, T., & van Rhenen, W. (2008). Workaholism, burnout and work engagement: Three of a kind or three different kinds of employee well-being? *Applied Psychology: An International Review*, 57, 173-203. doi:10.1111/j.1464-0597.2007.00285.x

Schlechter, A., Thompson, N. C., & Bussin, M. (2015). Attractiveness of non-financial rewards for prospective knowledge workers. *Employee Relations*, *37*, 274-295. doi:10.1108/ER-06-2014-0077

Secchi, D. (2015). A case for agent-based models in organizational behavior and team research. *Team Performance Management: An International Journal*, *21*, 37-50. doi:10.1108/TPM-12-2014-0063

Sedgwick, P. (2014). Cross-sectional studies: Advantages and disadvantages. *BMJ (British Medical Journal*), *348*(2), 1-2. doi:10.1136/bmj.g2276

Seifert, M., Brockner, J., Bianchi, E. C., & Moon, H. (2016). How workplace fairness affects employee commitment. *MIT* (*Massachusetts Institute of Technology*) *Sloan Management Review*, *57*(2), 15-17. Retrieved from http://sloanreview.mit.edu

Selander, K. (2015). Work engagement in the third sector. *Voluntas*, *26,* 1391-1411. doi:10.1007/s11266-014-9465-y

Selander, K., & Ruuskanen, P. (2016). Why do third sector employees intend to remain or leave their workplace? *Nordic Journal of Working Life Studies*, *6*, 81-100. doi:10.19154/njwls.v6i2.4973

Semachew, A., Belachew, T., Tesfaye, T., & Adinew, Y. M. (2017). Predictors of job satisfaction among nurses working in Ethiopian public hospitals, 2014: Institution-based cross-sectional study. *Human Resources for Health*, *15(*1), 1-8. doi:10.1186/s12960-017-0204-5

Seppälä, P., Mauno, S., Feldt, T., Hakanen, J., Kinnunen, U., Tolvanen, A., & Schaufeli, W. (2009). The construct validity of the Utrecht Work Engagement Scale: Multi-sample and longitudinal evidence. *Journal of Happiness Studies*, *10*, 459-48. doi:10.1007/s10902-008-9100-y

Shamim, A., & Ghazali, Z. (2015). The role of self-construals in developing customer value co-creation behavior. *Global Business and Management Research: An International Journal*, *7*, 19-27. Retrieved from http://www.gbmr.ioksp.com

Shantz, A., Alfes, K., & Arevshatian, L. (2016). HRM in healthcare: The role of work

    engagement. *Personnel Review*, *45*, 274-295. doi:10.1108/PR-09-2014-0203

Sharanya, T. (2016). A study on factors influencing on employee retention in CMR

    College of Engineering & Technology. *Sumedha Journal of Management*, *5*, 133-

    144. Retrieved from http://cmrcetmba.in/sumedha.php

Sharma, J., & Dhar, R. L. (2016). Factors influencing job performance of nursing staff:

    Mediating role of affective commitment. *Personnel Review*, *45*, 161-182.

    doi:10.1108/PR-01-2014-0007

Sharma, M. S., & Halvadia, N. B. (2015). Measuring service quality of Internet banking

    portal in India. *Annals of Management Science*, *4*(2), 29-51. Retrieved from

    http://annalsofms.org/

Sharma, A., & Namburdiri, R. (2015). Job-leisure conflict, turnover intention and the role

    of job satisfaction as a mediator: An empirical study of Indian IT professionals.

    South Asian Journal of Management, *22*(1), 7-27. Retrieved from

    http://www.sajm-amdisa.org

Sheperd, E., & Yeo, G. (2003). *Managing records: A handbook of principles and*

    practice. London, England: Facet.

Sheperis, C. J., Young, J. S., & Daniels, M. J. (2017). *Counseling research: Quantitative,*

    qualitative, and mixed methods (2nd ed.). Boston, MA: Pearson.

Sherwood, G., Koshy Cherian, U., Horton-Deutsch, S., Kitzmiller, R., & Smith-Miller, C.

    (2018). Reflective practices: Meaningful recognition for healthy work

    environments *Nursing Management*, *24*(10), 30-34. doi:10.7748/nm.2018.e1684

Shin, Y. B., Koh, S. H., & Shim, C. S. (2015). Information processing model to measure important determinants on job satisfaction. *Journal of Business and Retail Management Research*, *9*(2), 100-109. Retrieved from http://www.jbrmr.com

Shoorideh, F. A., Ashktorab, T., Yaghmaei, F., & Alavi Majd, H. (2015). Relationship between ICU nurses' moral distress with burnout and anticipated turnover. *Nursing Ethics*, *22*(1), 64-76. doi:10.1177/0969733014534874

Shu, C.-Y. (2015). The impact of intrinsic motivation on the effectiveness of leadership style toward on work engagement. *Contemporary Management Research*, *11*, 327-350. doi:10.7903/cmr.14043

Shuck, B., Zigarmi, D., & Owen, J. (2015). Psychological needs, engagement, and work intentions: A Bayesian multi-measurement mediation approach and implications for HRD. *European Journal of Training and Development*, *39*, 2-21. doi:10.1108/EJTD-082014-0061

Shurden, M., Santandreu, J., & Shurden, S. (2016). An application of partial least squares path analysis to student satisfaction. *Academy of Educational Leadership Journal*, *20*(2), 51-61. Retrieved from http://www.abacademies.org

Siddiqi, A. F. (2014). An observatory note on tests for normality assumptions. *Journal of Modelling in Management*, *9*, 290-305. doi:10.1108/JM2-04-2014-0032

Sijtsma, K. (2016). Playing with data—or how to discourage questionable research practices and stimulate researchers to do things right. *Psychometrika*, *81*(1), 1-15. doi:10.1007/s11336-015-9446-0

Simha, A., Huang, H., & Elloy, D. F. (2015). Demographic contributors to burnout, and the link between burnout and commitment. *Journal of Organizational Psychology*, *15*(1), 24-33. Retrieved from http://www.na-businesspress.com

Singh, A. S., & Masuku, M. B. (2014). Sampling techniques & determination of sample size in applied statistics research: An overview. *International Journal of Economics, Commerce and Management*, *2*(11), 1-22. Retrieved from http://ijecm.co.uk

Sisko, A. M., Keehan, S. P., Cuckler, G. A., Madison, A. J., Smith, S. D., Wolfe, C. J., … Poisal, J. A. (2014). National health expenditure projections, 2013-23: faster growth expected with expanded coverage and improving economy. *Health Affairs*, *33*, 1841-1850. doi:10.1377/hlthaff.2014.0560

Smollan, R. K. (2013). Trust in change managers: The role of affect. *Journal of Organizational Change Management*, *26*, 725-747. doi:10.1108/JOCM-May-2012-0070

Smothers, J., Doleh, R., Celuch, K., Peluchette, J., & Valadares, K. (2016). Talk nerdy to me: The role of intellectual stimulation in the supervisor-employee relationship. *Journal of Health and Human Services Administration*, *38*, 478-508. https://www.jhhsa.spaef.org

Snavely, T. M. (2016). A brief economic analysis of the looming nursing shortage in the United States. *Nursing Economic$*, *34*(2), 98-100. Retrieved from http://www.nursingeconomics.net

Sobottka, E. A. (2016). Commitment and regulation. Ethics in research and the human

    sciences. *International Journal of Action Research*, *12*, 116-143. Retrieved from

    http://www.hampp-verlag.de/hampp

Sohail, M., & Rehman, C. A. (2015). Stress and health at the workplace-A review of the

    literature. *Journal of Business Studies Quarterly*, *6*(3) 94-121. Retrieved from

    http://jbsq.org

Sommestad, T., Hallberg, J., Lundholm, K., & Bengtsson, J. (2014). Variables

    influencing information security policy compliance: A systematic review of

    quantitative studies. *Information Management & Computer Security*, *22*, 42-75.

    doi:10.1108/IMCS-08-2012-0045

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. (1994). *Job Satisfaction Survey*. Retrieved from

    www.http://shell.cas.usf.edu/~spector/scales/jsspag

Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and*

    consequences. Thousand Oaks, CA: Sage.

Spetz, J. (2014). How will health reform affect demand for RNs? *Nursing Economic$*,

    32(1), 42-44. Retrieved from http://www.nursingeconomics.net/

Sritharan, G., Mills, A. C., Levinson, M. R., & Gellie, A. L. (2016). Doctors' attitudes

    regarding not for resuscitation orders. *Australian Health Review*, *40*(6), 1A-1H.

    doi:10.1071/AH16161

Stockman, C. (2015). Achieving a doctorate through mixed methods research. *Electronic Journal of Business Research Methods*, *13(2)*, 74-84. Retrieved from http://www.ejbrm.com/

Stratton, S. J. (2015). Assessing the accuracy of survey research. *Prehospital and Disaster Medicine*, *30*, 225-226. doi:10.1017/S1049023X15004719

Suan, C. L., & Nasurdin, A. M. (2016). Supervisor support and work engagement of hotel employees in Malaysia: Is it different for men and women? *Gender in Management: An International Journal*, *31*(1), 2-18. doi:10.1108/GM-11-2014-0105

Sufahani, S. F., & Ahmad, A. (2012). A comparison between normal and non-normal data in bootstrap. *Applied Mathematical Sciences*, *6*, 4547-4560. Retrieved from http://www.m-hikari.com

Swartz, E., Amatucci, F. M., & Coleman, S. (2016). Using a multiple method and mixed mode approach to examine women entrepreneur negotiating styles. *International Journal of Gender and Entrepreneurship*, *8*, 48-68. doi:10.1108/IJGE-09-2013-0060

Tai, T. W. C., & Bame, S. (2017). Organizational and community factors associated with magnet status of U.S. hospitals. *Journal of Healthcare Management*, *62*, 62-76. Retrieved from https://ache.org

Tam, N. T., Huy, N. T., Thoa, L. T. B., Long, N. P., Trang, N. T. H., Hirayama, K., & Karbwang, J. (2015). Participants' understanding of informed consent in clinical trials over three decades: Systematic review and meta-analysis. *Bulletin of the World Health Organization*, *93*, 186-198. doi:10.2471/BLT.14.141390

Tan, B. U. (2016). The role of work centrality in the relationship between work alienation and organisational commitment: A study of Turkish SMEs. *Journal for East European Management Studies*, *21*(1), 60-81. doi:10.1688/JEEMS-2016-Ucanok

Tang, K. (2015). Estimating productivity costs in health economic evaluations: A review of instruments and psychometric evidence. *PharmacoEconomics*, *33*, 31-48. doi:10.1007/s40273-014-0209-z

Tangmanee, C., & Niruttinanon, P. (2015). Effects of forced responses and question display styles on web survey response rates. *International Journal of Research in Business and Social Science*, *4*(2), 54-62. Retrieved from http://www.ssbfnet.com

Taper, M. L., & Ponciano, J. M. (2016). Evidential statistics as a statistical modern synthesis to support 21st century science. *Population Ecology*, *58*(1), 9-9. doi:10.1007/s10144-015-0533-y

Tarigan, V., & Ariani, D. W. (2015). Empirical study relations job satisfaction, organizational commitment, and turnover intention. *Advances in Management and Applied Economics*, *5*(2), 21-42. Retrieved from https://www.scienpress.com

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, *2*, 53-55. doi:10.5116/ijme.4dfb.8dfd

Tejpal, P. (2015). Enhancing the job satisfaction level through dimensions of employee engagement: An empirical study on private sector bank managers. *Drishtikon: A Management Journal*, *7*(1), 22-40. Retrieved from http://www.publishingindia.com

Tella, A. (2015). Electronic and paper-based data collection methods in library and
information science research. *New Library World*, *116*, 588-609.
doi:10.1108/NLW-12-2014-0138

Teoh, K. R., Coyne, I., Devonish, D., Leather, P., & Zarola, A. (2016). The interaction
between supportive and unsupportive manager behaviors on employee work
attitudes. *Personnel Review*, *45*, 1386-1402. doi.10.1108/PR-05-2015-0136

Thorton, R. D., Nurse, N., Snavely, L., Hackett-Zahler, S., Frank, K., & DiTomasso, R.
A. (2017). Influences on patient satisfaction in healthcare centers: A semi-
quantitative study over 5 years. *BMC* (*BioMed Central*) *Health Services
Research*, *17*(361), 1-9. doi:10.1186/s12913-017-2307-z

Tiwari, V., & Singh, P. N. (2014). Impact of occupational stress on the relationship
between job involvement and motivation. *IPE* (*Institute of Public Enterprise*)
Journal of Management, *4*, 78-91. Retrieved from http://www.ipeindia.org/

Toode, K., Routasalo, P., Helminen, M., & Suominen, T. (2015). Hospital nurses'
working conditions about motivation and patient safety. *Nursing Management*,
21(10), 31-41. doi:10.7748/nm.21.10.31.e1293

Top, M., & Tekingündüz, S. (2015). Patient safety culture in a Turkish public hospital: A
study of nurses' perceptions about patient safety. *Systemic Practice and Action
Research*, *28*, 87-110. doi:10.1007/s11213-014-9320-5

Tosun, N., & Ulusoy, H. (2017). The relationship of organizational commitment, job
satisfaction and burnout on physicians and nurses? *Journal of Economics &
Management*, *28*, 90-111. doi:10.22367/jem2017.28.06

Trajkovski, V. (2016). How to select appropriate statistical test in scientific article. *Journal of Special Education and Rehabilitation*, *17*(3), 5-28. Retrieved from http://jser.fzf.ukim.edu.mk

Trybou, J., De Pourcq, K., Paeshuyse, M., & Gemmel, P. (2014). The importance of social exchange to nurses and nurse assistants: Impact on retention factors. *Journal of Nursing Management*, *22*, 563-571. doi:10.1111/jonm.12039

Tüzün, I. K., Çetin, F., & Basim, H. N. (2014). The role of psychological capital and supportive organizational practices in the turnover process. *METU* (*Middle East Technical School*) *Studies in Development*, *41*(2), 85-103. Retrieved from http://http://www2.feas.metu.edu.tr/metusd/ojs/index.php/metusd/index

Tziner, A., Ben-David, A., Oren, L., & Sharoni, G. (2014). Attachment to work, job satisfaction and work centrality. *Leadership & Organization Development Journal*, *35*, 555-565. doi:10.1108/LODJ-08-2012-0102

Udo-Akang, D. (2013). Ethical orientation for new and prospective researchers. *American International Journal of Social Science*, *2*(1), 54-64. Retrieved from http://www.aijssnet.com

Ugwu, F. O., Onyishi, I. E., & Rodríguez-Sánchez, A. M. (2014). Linking organizational trust with employee engagement: The role of psychological empowerment. *Personnel Review*, *43*, 377-400. doi:10.1108/PR-11-2012-0198

Ünal, Z. M., & Turgut, T. (2015). The buzzword: Employee engagement. Does person-organization fit contribute to employee engagement? *Iranian Journal of Management Studies*, *8*, 157-179. Retrieved from https://ijms.ut.ac.ir

Unruh, L., & Zhang, N. J. (2014). The hospital work environment and job satisfaction of

    newly licensed registered nurses. *Nursing Economic$*, *32*(6), 296-305, 311.

    Retrieved from http://www.nursingeconomics.net/

Unruh, L. Y., Raffenaud, A., Fottler, M., & Fragoso, J. (2016). Work–family conflict

    among newly licensed registered nurses: A structural equation model of

    antecedents and outcomes. *Journal of Healthcare Management*, *61*, 129-147.

    Retrieved from https://ache.org

Urban, A., & Quinlan, E. (2014). Not for the faint of heart. *Qualitative Research*

    Organizations and Management, *9*, 47-65. doi:10.1108/QROM-10-2012-1107

U.S. Department of Health and Human Services. (1979). *The Belmont report: Ethical*

    principles and guidelines for the protection of human subjects of research.

    Retrieved from http://www.hhs.gov

U.S. Department of Health and Human Services. (2008). *Nursing workforce survey data*

    (*National sample survey of registered nurses*). Retrieved from https:

    https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/index.html

U.S. Department of Labor, Bureau of Labor Statistics. (2017a). *Occupational*

    employment and wages, May 2017, 29-1141 Registered Nurses. Retrieved from

    https://www.bls.gov

U.S. Department of Labor, Bureau of Labor Statistics, BLS Reports. (2017b). *Women in*

    the labor force: A databook (Report 1071). Retrieved from www.bls.gov

Vadillo, P. C., Rojo, E. S., Garces, A., & Checton, M. G. (2016). Maximizing healthcare

    professionals' use of new computer technologies in a small, urban hospital's

    critical care unit. *Journal of Healthcare Management*, *61*, 352-363. Retrieved

    from https://ache.org

Vaingankar, J. A., Subramaniam, M., Abin, E., Picco, L., Chua, B. Y., Eng, G. K., …

    Chong, S. A. (2014). Development, validity and reliability of the short

    multidimensional positive mental health instrument. *Quality of Life Research*, *23*,

    1459-1477. doi:10.1007/s11136-013-0589-0

Van Bogaert, P., Peremans, L., Van Heusden, D. V., Verspuy, M., Kureckova, V., Van de

    Cruys, Z., & Franck, E. (2017). Predictors of burnout, work engagement and

    nurse reported job outcomes and quality of care: A mixed method study *BMC*

    (*BioMed Central*) *Nursing*, *16*(5), 1-14. doi:10.1186/s12912-016-0200-4

van Harten, J., Knies, E., & Leisink, P. (2016). Employer's investments in hospital

    workers' employability and employment opportunities. *Personnel Review*, *45*, 84-

    102. doi:10.1108/PR-05-2014-0115

Vargha, A., Bergman, L. R., & Delaney, H. D. (2013). Interpretation problems of the

    partial correlation with nonnormally distributed variables. *Quality and Quantity*,

    47, 3391-3402. doi:10.1007/s11135-012-9727-y

Vera, M., Martínez, I. M., Lorente, L., & Chambel, M. J. (2016). The role of co-worker

    and supervisor support in the relationship between job autonomy and work

    engagement among Portuguese nurses: A multilevel study. *Social Indicators*

    Research, *126*, 1143-1156. doi:10.1007/s11205-015-0931-8

Vermeir, P., Degroote, S., Vandijck, D., Mariman, A., Deveugele, M., Peleman, R., …
Vogelaers, D. (2017). Job satisfaction about communication in health care among
nurses: A narrative review and practical recommendations. *SAGE Open*, *7*(2), 1-
11. doi:10.1177/2158244017711486

Vivek, S. D., Beatty, S. E., Dalela, V., & Morgan, R. M. (2014). A generalized
multidimensional scale for measuring customer engagement. *Journal of
Marketing Theory and Practice*, *22*, 401-420. doi:10.2753/MTP1069-6679220404

Vroom, V. H. (1964). *Work and motivation*. New York, NY: Wiley.

Wagner, J. D., Bezuidenhout, M. C., & Roos, J. H. (2015). Communication satisfaction
of professional nurses working in public hospitals. *Journal of Nursing
Management*, *23*, 974-982. doi:10.111/jonm.12243

Walker, A. G. (2013). The relationship between the integration of faith and work with life
and job outcomes. *Journal of Business Ethics*, *112*, 453-461. doi:10.1007/s10551-
012-1271-0

Walsh, I. (2015). Using quantitative data in mixed-design grounded theory studies: An
enhanced path to formal grounded theory in information systems. *European
Journal of Information Systems*, *24*, 531-557. doi:10.1057/ejis.2014.23

Wang, C. N., Nguyen, N. T., & Tuyen, T. T. (2014). The study of staff satisfaction in
consulting center system-A case study of job consulting centers in Ho Chi Minh
City, Vietnam. *Asian Economic and Financial Review*, *4*, 472-491. Retrieved
from http://www.aessweb.com

Ward, P., Clark, T., Zabriskie, R., & Morris, T. (2014). Paper/Pencil versus online data
collection: An exploratory study. *Journal of Leisure Research*, *46*(1), 84-105.
Retrieved from http://www.nrpa.org

Weaver, K., Crayne, M. P., & Jones, K. S. (2016). I-O at a crossroad: The value of an
intersectional research approach. *Industrial and Organizational Psychology*, *9*(1),
197-206. doi:10.1017/iop.2015.136

Wei, Y.-C. (2015). Do employees high in general human capital tend to have higher
turnover intention? The moderating role of high-performance HR practices and P-
O fit. *Personnel Review*, *44*, 739-756. doi:10.1108/PR-07-2013-0137

Wheatley, C. (2017). Nursing overtime: Should it be regulated? *Nursing Economic*$,
35(4), 213-217. Retrieved from http://www.nursingeconomics.net

White, P. (2015a). Appreciating your staff makes sound business sense. *Human Resource
Management International Digest*, *23*, 31-33. doi:10.1108/HRMID-01-2015-0014

White, P. (2015b). Authentic appreciation creates a winning workforce. *Human Resource
Management International Digest*, *23*, 25-27. doi:10.1108/HRMID-12-2014-0161

Wilczyska, A., Batorski, D., & Sellens, J. T. (2016). Employment flexibility and job
security as determinants of job satisfaction: The case of Polish knowledge
workers. *Social Indicators Research*, *126*, 633-656. doi:10.1007/s11205-015-
0909-6

Williams, M. N., Gómez Grajales, C. A., & Kurkiewicz, D. (2013). Assumptions of
multiple regression: Correcting two misconceptions. *Practical Assessment,
Research & Evaluation*, *18*(11), 1-14. Retrieved from http://pareonline.net/

Williams, J., Greene, S., Doyle, E., Harris, E., Layte, R., McCoy, S., ... Thorton, M. (2009). *Growing up in Ireland: National longitudinal study of children- The lives of 9-year-olds.* Retrieved from https://www.esri.ie/pubs/BKMNEXT154.pdf

Williams, C., Miyazaki, K., Borkowski, D., McKinstry, C., Cotchet, M., & Haines, T. (2015). Research capacity and culture of the Victorian public health allied health workforce is influenced by key research support staff and location. *Australian Health Review*, *39*, 303-311. doi:10.1071/AH14209

Wilson, N. A. (2015). Factors that affect job satisfaction and intention to leave of allied health professionals in a metropolitan hospital. *Australian Health Review*, *39*, 290-294. doi:10.1071/AH14198

Wittmer, J. L. S., Shepard, A. K., & Martin, J. W. (2015). Schedule preferences congruence and employee outcomes in unionized shift workers. *American Journal of Business*, *30*, 92-110. doi:10.1108/AJB-01-2014-0001

Wnuk, M. (2017). Organizational conditioning of job satisfaction. A model of job satisfaction. *Contemporary Economics*, *11*(1), 31-44. doi:10.5709/ce.1897-9254.227

Wouters, K., Maesschalack, J., Peeters, C. F. W., & Roosen, M. (2014). Methodological issues in the design of online surveys for measuring unethical work behavior: Recommendations on the basis of a split-ballot experiment. *Journal of Business Ethics*, *120*, 275-289. doi:10.1007/s10551-013-1659-5

Wu, C.-L. (2015). Using the theory of planned behavior to explain and predict behavior intentions in Taiwan. *Journal of International Education Research*, *11*, 153-162. Retrieved from http://cluteinstitute.com

Wu, C., Li, J., & Chang, T. (2015). SLinRA^{2}S: Actively supporting regression analysis

   with R. *Information Systems and e-Business Management*, *13*, 309-328.

   doi:10.1007/s10257-014-0262-3

Yahaya, R., & Ebrahim, F. (2016). Leadership styles and organizational commitment:

   Literature review. *Journal of Management Development*, *35*, 190-216.

   doi:10.1108/JMD-01-2015-0004

Yang, H., Lv, J., Zhou, X., & Liu, H., & Mi, B. (2017). Validation of work pressure and

   associated factors influencing hospital nurse turnover: A cross-sectional

   investigation in Shaanxi Province, China. *BMC* (*BioMed Central*) *Health Services

   Research*, *17*(112), 1-11. doi:10.1186/s12913-017-2056-z

Ye, J., & King, J. (2016). Managing the downside effect of a productivity orientation.

   Journal of Services Marketing, *30*(2), 238-254. doi:1108/JSM-10-2014-0351

Yin, R. K. (2014). *Case study research design and methods*. Thousand Oaks, CA: Sage.

Yin-Fah, B. C., Foon, Y. S., Chee-Leong, L., & Osman, S. (2010). An exploratory study

   on turnover intention among private sector employees. *International Journal of

   Business and Management*, *5*(8), 57- 64. Retrieved from http://ccsenet.org/

Ying-Wen, L. (2012). The relationships among work values, burnout, and organizational

   citizenship behaviors. *International Journal of Contemporary Hospitality

   Management*, *24*, 251-268. doi:10.1108/09596111211206169

Yousaf, A., Sanders, K., & Abbas, Q. (2015). Organizational/occupational commitment

   and organizational/occupational turnover intentions, *Personnel Review*, *44*, 470-

   491. doi:10.1108/PR-12-2012-0203

Yu-Cheng, L., Yi-Fang, H., & Guo, Y.-B. (2013). Construct DTPB model by using DEMATEL: A study of a university library website. *Program, 47*(2), 155-169. doi:10.1108/00330331311313744

Zahaj, M., Saliaj, A., Metani, L., Nika, S., & Alushi, E. (2016). Factors related to job satisfaction among nurses. *European Scientific Journal*, *12*(5), 100-110. doi:10.19044/esj.2016.v12n5p100

Zellmer-Bruhn, M., Caligiuri, P., & Thomas, D. (2016). Experimental design in international business research. *Journal of International Business Studies*, *47*, 399-412. doi:10.1057/jibs.2016.12

Zendeh, A. B., & Oskuie, H. A. (2017). A model for identification of informal groups' leaders. *International Journal of Organizational Leadership*, *6*(2), 176-189. Retrieved from http://aimijournal.com

Zezula, P. (2015). Similarity searching for the big data: Challenges and research objectives. *Mobile Networks and Applications*, *20*, 487-496. doi:10.1007/s11036-014-0547-2

Zhang, J., Zhao, Y., & Wang, Y. (2016). A study on statistical methods used in six journals of library and information science. *Online Information Review*, *40*, 416-434. Retrieved from http://www.emeraldinsight.com

Zientek, L., Nimon, K., & Hammack-Brown, B. (2016). Analyzing data from a pretest-posttest control group design. *European Journal of Training and Development, 40*, 638-659. doi:10.1108/EJTD-08-2015-0066

Zin, M. L. B. M. (2017). The mediating role of perceived organizational support on the relationship between pay and intention to stay. *Management Review: An International Journal*, *12*(1), 57-76. Retreived from https://www.informs.org/Community/KINFORMS/Publication

Zinn, J. L., Gugliemi, C. L., Davis, P. P., & Moses, C. (2012). "Addressing the nursing shortage" The need for the nurse residency programs. *Association of periOperative Registered Nurses [AORN] Journal*, *96*, 652-657. doi:10.1016/j.aorn.2012.09

Zyphur, M. J., & Pierides, D. C. (2017). Is quantitative research ethical? Tools for ethically practicing, evaluating, and using quantitative research. *Journal of Business Ethics*, *143*(1), 1-16. doi:10.1007/s10551-017-3549-8

Appendix A: Letter of Invitation

Survey Packet Item #1

Dear Prospective Participant:

My name is Yolanda Edwards-Dandridge, and I am a doctoral student at Walden University. I would like to invite you to participate in my research study designed to understand the relationship between work engagement, job satisfaction, and nurse turnover intention. The focus of my study involves registered nurses who work at hospitals located in New York. As the researcher, my involvement provides a platform to recruit prospective participants. Though, I am an employee in the healthcare sector, the study does not influence my role or my employment.

In the United States, any researcher who is involved in recruiting participants for a research study must acquire informed consent from all participants either by requiring the participants to sign a paper document, click a tab on an electronic screen, or provide implied consent. For this study, completion of the survey implies consent which means completing the survey you provide consent to participate in the research study. If you are interested in participating in this research study, please continue by reading the next page entitled "Informed Consent."

Thank you,

Yolanda Edwards-Dandridge

Appendix B: Work & Well-being Survey (UWES-9)

Survey Packet Item #2

Dear Participant:

The following survey items relate to work engagement. Please rate your level of

engagement at work with each descriptive item. Also, please answer all items honestly

and completely on this answer sheet. Please note that I will discard incomplete surveys.

Please continue the survey until you see the "done" tab.

Work & Well-being Survey (UWES-9)

Never	Almost Never	Rarely	Sometimes	Often	Very Often	Always
0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

1. At my work, I feel bursting with energy

2. At my job, I feel strong and vigorous.

3. I am enthusiastic about my job.

4. My job inspires me.

5. When I get up in the morning, I feel like going to work.

6. I feel happy when I am working intensely.

7. I am proud of the work that I do.

8. I am immersed in my work.

9. I get carried away when I am working.

Appendix C: Job Satisfaction Survey

Survey Packet Item #3

Dear Participant:

The following survey items relate to job satisfaction. Please rate your level of job

satisfaction with each descriptive item. Also, please answer all items honestly and

completely, as I will discard incomplete surveys. Continue to scroll down to the page

until you see the "done" tab. Thank you.

Job Satisfaction Survey

Disagree Very Much	Disagree Moderately	Disagree Slightly	Agree Slightly	Agree Moderately	Agree Very Much
1	2	3	4	5	6

1. I feel I am being paid a fair amount for the work I do.

2. There is really too little chance for promotion on my job.

3. My supervisor is quite competent in doing his/her job.

4. I am not satisfied with the benefits I receive.

5. When I do a good job, I receive the recognition for it that I should receive.

6. Many of our rules and procedures make doing a good job difficult.

7. I like the people I work with.

8. I sometimes feel my job is meaningless.

9. Communications seem good within this organization.

10. Raises are too few and far between.

11. Those who do well on the job stand a fair chance of being promoted.

12. My supervisor is unfair to me.

13. The benefits we receive are as good as most other organizations offer.

14. I do not feel that the work I do is appreciated.

15. My efforts to do a good job are seldom blocked by red tape.

16. I find I have to work harder at my job because of the incompetence of people I work with.

17. I like doing the things I do at work.

18. The goals of this organization are not clear to me.

19. I feel unappreciated by the organization when I think about what they pay me.

20. People get ahead as fast here as they do in other places.

21. My supervisor shows too little interest in the feelings of subordinates.

22. The benefit package we have is equitable.

23. There are few rewards for those who work here.

24. I have too much to do at work.

25. I enjoy my coworkers.

26. I often feel that I do not know what is going on with the organization.

27. I feel a sense of pride in doing my job.

28. I feel satisfied with my chances for salary increases.

29. There are benefits we do not have which we should have.

30. I like my supervisor.

31. I have too much paperwork.

32. I don't feel my efforts are rewarded the way they should be.

33. I am satisfied with my chances for promotion.

34. There is too much bickering and fighting at work.

35. My job is enjoyable.

36. Work assignments are not fully explained.

Appendix D: Turnover Intension Scale

Survey Packet Item #4

Dear Participant:

The following survey items relate to turnover intention. Please rate your level of turnover intention for each descriptive item. Also, please answer all items honestly and completely, as I will discard incomplete surveys. Continue to scroll down to the end of items.

Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
1	2	3	4	5

1. I often think about quitting my present job.

2. I will probably look for a new job in the next year.

3. As soon as possible, I will leave the organization.

Appendix E: Demographic Questions

Survey Packet Item #5

Demographic Questionnaire

Dear Participants:

Demographic questions provide information about characteristics of participants. These characteristics may help researchers understand participants' perspectives. Therefore, to ensure accurate research findings, please answer all items honestly and completely, as I will discard incomplete surveys.

1. <u>Age</u>

What is your age?   ____

2. <u>Gender</u>

What is your gender?   ____

3. <u>Race</u>

What is your race?   ____

4. <u>Ethnicity</u>

What is your ethnicity?   ____

5. <u>Experience</u>

How many years have you worked as a registered nurse?   ____

6. <u>Tenure</u>

How many years have you worked as a registered nurse   ____

at your current hospital?

Appendix F: Thank-You Letter

Survey Packet Item #6

Dear Research Participant:

I would like to extend my sincerest appreciation for affording me with your valuable time, effort, and contribution toward my research study. Your participation is important to understand the relationship between work engagement, job satisfaction, and nurse turnover intention in hospitals, located in New York. Please be aware that your contribution will help hospital managers and nursing leadership understand some factors that may affect the intentions of nurses who leave their current employment, which affect the delivery of quality of care and job satisfaction.

Once again, I thank you for your assistance with the study.

Best and healthy regards,

Yolanda Edwards-Dandridge

Walden University doctoral candidate

Appendix G: Permission to Use Work & Well-being Survey (UWES-9)

by Wilmar Schaufeli

Subject: Research use of the UWES

Date: April 20, 2015 10:41 PM EST

From: Wilmar B. Schaufeli, Ph.D.

To: Yolanda Edwards-Dandridge

Dear Yolanda,

You may use the UWES for non-commercial, academic research. See my website for

further details.

With kind regards,

Wilmar Schaufeli

Wilmar B. Schaufeli, PhD Social and Organizational Psychology

Appendix H: Permission to Use Job Satisfaction Survey

By Dr. Paul Spector

Dear Yolanda:

You have my permission for noncommercial research/teaching use of the JSS. 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 (link below). 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 Also 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

Appendix I: Permission Letter Request – Turnover Intention Scale

Dear Dr. Mobley:

My name is Yolanda Edwards-Dandridge and I am a doctoral student at Walden University. My doctoral study is entitled "*Relationship Between Work Engagement, Job Satisfaction, and Nurse Turnover Intention in Hospitals*." I was excited when I found you conducted a research study on "*An evaluation of precursors of hospital employee turnover*," as I am focusing on nurses employed in hospital settings. I would be extremely appreciative for your permission to use the Mobley et al. (1978) turnover intention scale, testing nurses' turnover intention.

Should you grant permission for the use of the turnover intent model, I would appreciate it if you would confirm via e-mail. My e-mail address is XXXXXXXX. Once I complete the research, I will forward a summary to your attention.

I appreciate your consideration, with gratitude and sincerity,

Yolanda Edwards-Dandridge

Appendix J: Permission Letter from Dr. William Mobley

Yolanda.

Permission granted. Best wishes with your research.

William Mobley

Appendix K: Combined Survey

Dear Participant,

The following survey items relate to work engagement, job satisfaction, and turnover intention. Please rate your level of work engagement, job satisfaction, and turnover intention. In addition, please answer all items honestly and completely on this answer sheet. Please note that I will discard incomplete surveys.

Thank you for your participation!

Work Engagement

	Never	Almost Never	Rarely	Sometimes	Often	Very Often	Always
1. At my work, I feel bursting with energy.	0	1	2	3	4	5	6
2. At my job, I feel strong and vigorous.	0	1	2	3	4	5	6
3. I am enthusiastic about my job.	0	1	2	3	4	5	6
4. My job inspires me.	0	1	2	3	4	5	6
5. When I get up in the morning, I feel like going to work.	0	1	2	3	4	5	6
6. I feel happy when I am workng intensely.	0	1	2	3	4	5	6
7. I am proud of the work that I do.	0	1	2	3	4	5	6
8. I am immersed in my work.	0	1	2	3	4	5	6
9. I get carried away when I am working.	0	1	2	3	4	5	6

Job Satisfaction

	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 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 procedure 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 unclear to me.	1	2	3	4	5	6	
19. I feel unappreciated by the organization when I think about what they pay	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	

Appendix K: Combined Survey (continued)

Job Satisfaction	(continued)	Disagree Very Much	Disagree Moderately	Disagree Slightly	Agree Slightly	Agree Moderately	Agree Very Much	
		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	
Turnover Intention		Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree		
1. I often think about quitting my present job.		1	2	3	4	5		
2. I will probably look for a new job in the next year.		1	2	3	4	5		
3. As soon as possible, I will leave the organization.		1	2	3	4	5		