

2020

## The Impact of Human Resources on Nurses' Turnover Intention

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# Walden University

College of Social and Behavioral Sciences

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Anita Jackson

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Walden University  
2019

Abstract

The Impact of Human Resources on Nurses' Turnover Intention

by

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MS, Howard University, 2007

BS, Bowie State University, 1999

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

General Psychology

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## Abstract

Nurse retention is of great concern to healthcare organizations including hospitals. With so many countries reporting a shortage in nursing personnel, healthcare organizations are now seeking ways to reduce this shortage. It is known that job satisfaction and turnover intention impact nurses' continued employment. However, the role of human resources (HR) impact on nurses' job satisfaction and turnover intention is unknown. The theoretical basis of this study came from the work of Bowen and Ostroff who argued the strength of HRM system regulates employee perceptions and outcomes within an organization. Therefore, the purpose of this study was to evaluate the impact HR service quality had on registered nurses' turnover intentions mediated by job satisfaction and moderated by gender, in a hospital setting within the state of Maryland. Data was collected from 83 registered nurses licensed in Maryland. A multiple regression analysis of data collected from HR service quality measures of responsiveness, reliability, and empathy in addition to gender, job satisfaction, and turnover intention revealed statistically nonsignificant results involving nurses' perceptions of HR service quality predicting turnover intention. Job satisfaction failed to mediate the relationship between HR service quality indicators and turnover intention, and gender failed to moderate the relationship between HR service quality indicators and turnover intention. Although the research revealed statistically nonsignificant findings, it adds to the body of literature regarding the topic of HR service quality. This study has social change implications by informing healthcare organizations about the significant role of HR service quality indicators and its impact on nursing job satisfaction and turnover intention.

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## Dedication

To all of the individuals in my life who have helped me with this process. I am truly grateful for your support and I dedicate this work to you.

## Acknowledgments

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## Chapter 1: Introduction to the Study

### **Introduction**

Hospitals employ many professionals to assist in the day-to-day operations. Specifically, hospitals use a significant number of nurses to provide bedside patient care in addition to management and leadership roles. To employ nursing professionals, hospitals and other organizations offer exceptional incentives to attract, hire, and retain nurses. Some of those incentives include lucrative sign-on bonuses, competitive salaries, loan forgiveness programs, and flexible working schedules (Hirschhorn, West, Hill, Cleary, & Hewlett, 2010; Tourangeau, Thomson, Cummings, & Cranley, 2013).

In spite of the incentives available in the nursing profession, a shortage of nurses is evident not only in the U.S. but also globally (Lavoie-Tremblay, Leclerc, Marchionni, & Drevniok, 2010; Nooney, Unruh, & Yore, 2010). This shortage is particularly prevalent in terms of the number of male nurses within this profession (Andrews, Stewart, Morgan, & D'Arcy, 2012; Rajacich, Kane, Williston, & Camerson, 2013), because nursing is stereotyped as a woman's profession. A question remains why there continues to be a shortage of nurses, especially male nurses.

It is within the human resources (HR) department and function that potential nursing candidates apply, interview, accept, or reject an offer of employment. Not only does HR regulate the recruiting process, but they also govern compensation, benefits, performance management, and training employees'. Current research on the effectiveness of HR in organizations exists, however, research is lacking in regards to the

role HR service quality plays in job satisfaction and turnover intentions, specifically in the nursing occupation.

This study will bring about a positive social change in the way hospital leadership, and HR within the hospital identify and perceive the importance of HR services and its impact on registered nurses' job satisfaction and turnover intention. Specifically, the results of this study may help hospitals and other healthcare organizations who hire registered nursing personnel with retention efforts involving nurses. This study will examine how registered nurses perceive the services they receive from HR and if those services influence their employment within the hospital. This chapter will include the background, problem statement, purpose of the study, research questions and hypotheses, theoretical framework, nature of study, definitions, assumptions, scope and delimitations, limitations, significance, and a summary.

### **Background of the Study**

Although men have been practicing nursing since the beginning of the profession, research based upon the male perspective is limited. Men in nursing experience discrimination such as being denied the opportunity to help female patients from the fear of being accused of inappropriate touching that can result in reprimands, or even termination. In addition, men are seen as the muscle in the workplace to lift and move heavy objects instead of a professional colleague (Brown, 2009). Another workplace challenge has been stringent disciplinary actions in comparison to their female colleagues (Evangelista & Sims-Giddens, 2007). Furthermore, a lack of support from managers and administration contributes to their dissatisfaction and ultimately intent to leave (Curtis,

Robinson, & Netten, 2009; Rajacich et al., 2013). Men tend to leave the nursing profession at a higher rate compared to females, in part due to this discrimination (Curtis et al., 2009; Rajapaksa & Rothstein, 2009).

Of the hardship's men face in nursing, one reason they leave their positions could be that they are not receiving the support they need from their organizations, including HR. For instance, Rajacich, Kane, Williston, and Camerson (2013) noted how male nurses remained in part-time nursing positions because of the lack of opportunity for full-time status for nurses working in acute care settings in Southwestern Ontario. This hindered them from receiving the organization's benefits and fully participating in HR staffing practices, although they worked 40 hours per week. As hospitals look into discovering new techniques to remain competitive and improve revenue, an additional goal is to alleviate the nursing shortage within the hospital setting. It is therefore necessary to identify any issues associated with HR service quality that hinder the recruitment and retention of men in the nursing profession.

### **Problem Statement**

The global nursing shortage exacerbates challenges that HR departments face in recruiting qualified nursing candidates to fill nursing vacancies in addition to training, and other costs associated with nurse turnover (De Gieter, Hofmans, & Pepermans, 2011;Welding, 2011; Zinn, Guglielmi, Davis, & Moses, 2012). The nursing shortage ensued because of factors such as an aging nursing workforce, lack of nurse educators to teach at colleges or universities, and low enrollment in nursing programs (Goodin, 2003). In addition to those factors, job satisfaction has been correlated to nurse turnover



intention. Specifically, lower levels of job satisfaction are related to higher levels of turnover intention (Larrabee et al., 2010). Wieck, Dols, and Landrum (2010) found that even satisfied nurses eventually plan to leave their current employer within 10 years.

Job satisfaction and turnover intention of nurses impacts healthcare organizations operations and effectiveness. Therefore, the problem is that while job satisfaction has been determined to be a cause of nurse turnover intention, there is insufficient knowledge about the role HR plays in nurse job satisfaction and turnover intention. Specifically, there remains a lack of research on the impact of HR service quality indicators such as responsiveness, reliability, and empathy on job satisfaction and turnover intention. Furthermore, the role of gender in these relationships has also not been explored in healthcare environments.

### **Purpose of the Study**

With challenges that are occurring in the healthcare industry including the nursing shortage, healthcare organizations strive to understand the effect human resource management (HRM) practices have on their employees. One method in determining the significance of HRM and its impact on healthcare organizations is through service quality indicators such as responsiveness, reliability, and empathy. Researchers have already utilized service quality indicators in the workplace however any association with men in nursing is nonexistent (Gilbert, De Winne, & Sels, 2011; Lee, Lee, & Kang, 2012; Uen, Ahlstrom, Chen, & Tseng, 2012)

With emphasis now on HR to help combat the nursing shortage, understanding the perception of HRM practices through service quality is necessary, especially if

outcomes can lead to better recruitment and retention efforts instead of employee turnover. Therefore, the purpose of this quantitative study is to determine how perceived HRM system effectiveness and job satisfaction relate to turnover intentions of nursing personnel through service quality indicators of responsiveness, reliability, and empathy, and ultimately determine if gender affects those results.

The independent variables in this study are HR service quality indicators from the Delmotte et al. (2012) measures of responsiveness, reliability, and empathy instrument. The moderator variable is self-reported gender and mediator is a job satisfaction measure from Hackman and Oldham (1976). The dependent variable for the study is nurses' turnover intention measure from Ang, Bartram, McNeil, Leggat, and Stanton (2013). The registered nursing participants in the study will answer three questions from the turnover intention questionnaire (Ang, Bartram, McNeil, Leggat, & Stanton, 2013). For example, I often think of leaving the organization is a question found within the turnover intention questionnaire.

### **Research Questions and Hypotheses**

The research questions and hypotheses of the study are:

*RQ1:* Do nurses' perceptions of HRM service quality indicators of responsiveness, reliability, and empathy influence turnover intention?

*H<sub>01</sub>:* Nurses' perceptions of HRM service quality assessed through the service quality indicators of responsiveness, reliability, and empathy will have no significant influence on turnover intention.

*H<sub>a1</sub>*: Nurses' perceptions of HRM service quality assessed through the service quality indicators of responsiveness, reliability, and empathy will significantly influence turnover intention.

*RQ2*: Does job satisfaction mediate the relationship between nurses' perceptions of HRM service qualities of responsiveness, reliability, and empathy and turnover intentions?

*H<sub>02</sub>*: Job satisfaction will not significantly mediate the relationship between nurses' perceptions of HRM service qualities of responsiveness, reliability, and empathy and turnover intentions.

*H<sub>a2</sub>*: Job satisfaction will significantly mediate the relationship between nurses' perceptions of HRM service qualities of responsiveness, reliability, and empathy and turnover intentions.

*RQ3*: Does gender moderate the relationship between nurses' perceptions of HRM service qualities of responsiveness, reliability, empathy and turnover intentions?

*H<sub>03</sub>*: Gender will not significantly moderate the relationship between nurses' perceptions of HRM service qualities of responsiveness, reliability, and empathy and turnover intentions.

*H<sub>a3</sub>*: Gender will significantly moderate the relationship between nurses' perceptions of HRM service qualities of responsiveness, reliability, and empathy and turnover intentions.

## **Theoretical Framework**

One purpose of HR in business is the management of people and how organizational performance can be improved through its employees. However oftentimes HR policies fail to be implemented resulting in employee dissatisfaction. According to Bowen and Ostroff (2004) in order to successfully implement policies and procedures that impact employee behavior an organization must have a strong HRM system.

The theoretical framework for this study draws on Bowen and Ostroff (2004) research of the strength of the HRM system which they contend will send consistent messages to employees about which behaviors are valued by the organization. A strong HRM system contributes to organizational performance and effectiveness while a weak HRM system produces unintended outcomes. Following Kelley's attribution theory (1967) they propose a strong HRM system must comprise of distinctiveness, consistency, and consensus (Van De Voorde, Paauwe, & Veldhoven, 2012).

Building on the work of Bowen and Ostroff, Delmotte et al. (2012) defined distinctiveness as the way employees perceive the HR practice (e.g. hiring, career opportunities, performance appraisal, training programs, and participation in decision making processes) as relevant to an organizational goal and how their behavior conforms to the rules governed by the organization. Delmotte et al. (2012) explain consistency in HR practices indicates uniformity of practices aligning with the organization's goals and objectives. Finally, Delmotte et al. define consensus as an agreement across an organization in terms of how to implement HR practices.

Drawing on the concepts of distinctiveness, consistency, and consensus Delmotte et al. (2012) developed a HR service quality measure. The Delmotte et al. measure expanded a prior similar measure by Parasuraman, Berry, and Zeithaml (1988, 1991). The Delmotte et al. study formed from three key elements of HR service quality. Those HR measures established were responsiveness, reliability, and empathy. Responsiveness refers to the efforts by HR staff to assist internal and external customers in the workplace. Reliability denotes the follow through of HR and empathy signifies how compassionate and understanding the HR staff is towards the needs of the customers. A thorough description of the HR context measuring responsiveness, reliability, and empathy will be discussed in Chapter 2.

In order to alleviate the nursing shortage, healthcare organizations who hire registered nursing personnel strive to find better recruitment and retention practices to hire nursing personnel. This study assists healthcare organizations who employ nursing personnel in identifying the role HR effectiveness plays in nursing turnover intentions.

### **Nature of the Study**

This study used a quantitative nonexperimental research design on registered nurses' perceptions with the effectiveness of the HRM system through service quality, job satisfaction, and intent to leave the organization. This non-experimental research design was also cross-sectional in nature because the data was collected on a single occasion. Quantitative research designs are used in diverse research arenas that include HR and organizational management (Baruch & Holtom, 2008), and in hospital settings (Chen & Lin, 2013).

The population of interest for this study was licensed registered nurses employed in healthcare organizations in the state of Maryland. Previous research recommends utilizing multiple regression analysis when studying mediator and moderator relationships (Aguinis, Beaty, Boik, & Pierce, 2005; Baron & Kenny, 1986). More importantly, nursing research continues to use multiple regression analysis in mediator and moderator studies (Bartram, et al., 2012; Masum et al., 2016; Walker & Campbell, 2013) as well as work in HR (Pasaoglu & Tonus, 2014). This research used a multiple regression analysis using SPSS software. Multiple regression was used to assess the relationship between the independent variables of HRM service quality (responsiveness, reliability, and empathy), and the dependent variable of turnover intention of registered nurses. Job satisfaction served as the mediator and gender served as the moderator. According to Baron and Kenny (1986), a moderator acts as an interaction term between the independent variable and the dependent variable. It affects the strength of the relationship between the two variables.

### **Operational Definition of Terms**

*Consensus:* Agreement across an organization regarding how to implement HR practices (Delmotte et al., 2012).

*Consistency:* Uniformity in HR practices aligning with the organizations' goals and objectives (Delmotte et al., 2012).

*Distinctiveness:* Features of an HRM system that capture the attention and interest of staff in organizational goals. Employee behaviors can conform or have opposing views. (Delmotte et al., 2012).

*Empathy*: HR professionals understanding the needs and desires of their employees (Delmotte et al., 2012; Parasuraman et al., 1988)

*Human Resource Management (HRM)*: A set of policies, practices, and procedures that govern individuals who work for an organization (Boxall, Ang, & Bartram, 2011; Noe, Hollenbeck, Gerhart, & Wright, 2008).

*Mediator*: A variable that determines how and why the predictor variable causes the outcome variable (Frazier, Tix, & Barron, 2004).

*Moderator*: A variable that determines if the predictor variable is strongly associated with the outcome variable (Frazier et al., 2004).

*Reliability*: HR professionals' duty to provide accurate and appropriate HR services to customers (Delmotte et al., 2012; Parasuraman et al., 1988).

*Responsiveness*: Ability to discern the needs of the organization and provide prompt services to customers (Delmotte et al., 2012; Parasuraman et al., 1988)

### **Assumptions**

The study assumed all participants who voluntarily completed the surveys answered each question truthfully and to the best of their abilities based upon their own experiences with the HR department in their current workplace. Furthermore, another assumption of this study was the registered nurses who participated truly were employed in a hospital at the time in which they completed the surveys. The final assumption is that the survey tools used in the study accurately measured responsiveness, reliability, and empathy in addition to job satisfaction and turnover intention proposed to the participants.

### **Scope and Delimitations**

Registered nurses who work in hospitals in the State of Maryland volunteered to participate in this study. This study specifically recruited registered nurses in Maryland because of the projected decline of nursing personnel in the state by 2025 (U.S. Department of Health and Human Services [DHHS], 2014). Research reveals a shortage of registered nurses has occurred because an aging workforce, low enrollment in colleges or universities, and lack of faculty teaching nursing coursework in addition to other influences. In addition, this study sought to determine HR's role in nurses' job satisfaction and turnover intention. This study is unique because it used Delmotte et al.'s (2012) measures of responsiveness, reliability, and empathy on registered nursing participants. The results of this study will be generalizable to other states within the US who have a similar projected supply and demand for nursing personnel based upon the recommendations of the US DHHS.

### **Limitations**

The study looked specifically at gender differences in terms of nursing personnel's beliefs regarding HR service quality, job satisfaction, and intention to quit an organization. One of the limitations of the study could be cultural differences or biases of HR. The field of nursing is made up of many cultures and nationalities who could enforce their beliefs in the workplace no matter how biased it may be. Another limitation of the study arises because the study is not longitudinal. Participants completed the questionnaires during one interval in comparison to completing the questionnaires over several intervals.



Furthermore, another limitation of the study could have occurred when governing bodies such as the US Department of Health and Joint Commission require random inspections of hospital practices and their facilities in order to confirm that regulations and practices are conducted within acceptable standards. During the week in which hospitals inspections occur, each department and staff members' participation is essential for success. Research reveals higher levels of stress, depression and anxiety, occur during this time and result in job dissatisfaction from their employees (Elkins et al., 2010). Unfortunately, these inspections occur at random and the hospital or other organizations have no control over this event.

Additionally, this study consisted of only nursing personnel. Other healthcare workers and nonclinical service workers did not participate in this study. Other research of this magnitude should consider other occupations including staff working in the HR department.

### **Significance and Implications for Social Change**

Nursing shortages has been a problem and healthcare organizations have difficulty in recruiting and retention of nursing personnel (Brunetto et al., 2012). In order to alleviate this problem, certain changes must occur. This includes the organizations ability to utilize other staffing methods such as engaging staffing agencies to maintain retention levels, and employing overtime and other methods to maintain productivity (Buchan, 2010). These temporary solutions to supplement staffing issues come at a higher cost to the organization (Wright & Bretthauer, 2010). Due to the high costs in turnover and recruitment efforts, it is essential for HR to understand that nursing

personnel turnover directly effects operations in a hospital environment. In essence, the findings of this study adds to the existing body of knowledge regarding HRM research by identifying the most significant HRM attribute of reliability, responsiveness, or empathy that will encourage nurse retention.

The outcome of these findings assists hospital HR departments in Maryland understanding its role in order to alleviate the nursing shortage. Furthermore, the findings of this study may lead to positive social change because the findings help identify nurses' perspective of HRM system service quality. These findings inform hospital HR departments of the impact they can have on nursing personnel intentions of leaving the hospital. Although research exists on nursing, it is limited or nonexistent in relation to HRM system service quality and intention to leave especially in male nursing personnel.

### **Summary**

This dissertation is composed of five chapters. Chapter 1 provided a brief overview of registered nurses' perceptions of HRM system effectiveness based upon service quality indicators of responsiveness, reliability, and empathy with job satisfaction acting as a mediator and gender as a moderator in terms of intention to leave the organization. Chapter 2 reviews the literature on HR service quality, nurse turnover intention, job satisfaction mediators, and gender as the moderator of nurses. Chapter 3 explains the methodological approach to the study. Chapter 4 presents the study's results while Chapter 5 summarizes the entire study and provides recommendations for future research.

## Chapter 2: Literature Review

### **Introduction**

In the United States, hospitals have treated acute and chronically ill persons since 1751 (“Nursing, History, and Healthcare”, n.d.). Although times have changed and major advances continue to occur in healthcare, major job functions and responsibilities remain for employees working in hospitals, specifically nurses.

Nursing has grown to become the largest health profession in the United States (US Department of Labor [DOL], Bureau of Labor Statistics [BLS], 2014). According to BLS (2014), healthcare workers made up 11.8 million people in 2014. The total amount of registered nurses from that group of healthcare workers were 2.7 million registered nurses. Although this profession dominates healthcare, there remains a shortage of registered nurses (Lavoie-Tremblay et al., 2010; Nooney et al., 2010), especially in terms of the number of male nurses (Andrews et al., 2012; Chen et al., 2013; Rajacick et al., 2013).

With the challenges that are occurring in the healthcare industry, including the nursing shortage, healthcare organizations that hire registered nursing personnel now look for reasons that affect the recruitment and retention of nursing personnel through job satisfaction and turnover intention (Roulin, Mayor, & Bangerter, 2014). Registered Nurses who are dissatisfied ultimately leave their workplace and as a result, job satisfaction and intention to quit continue to receive much attention in the nursing research.

Research is also ongoing regarding HR and its role in organization performance and effectiveness. One method in determining the effectiveness of HRM and its impact in the healthcare organization is through service quality indicators such as responsiveness, reliability, and empathy. Researchers have already studied service quality indicators in the healthcare industry (Gilbert et al. 2011; Lee et al., 2012; Uen et al., 2012); however, the association between HRM service quality indicators and retention efforts for male nurses is limited.

As healthcare organizations and hospitals continue to have difficulties with recruiting and retaining registered nurses, research must be done to determine what impact, if any, HR has on contributing to or preventing turnover. Specifically, understanding registered nurses perceptions of HR, measured through HRM service quality indicators could have a role in improving retention of registered nurses in general and male nurses in particular. The present study will determine if the independent variable HR service quality has an impact on the dependent variable of nursing turnover intention, and if this relationship is further mediated by job satisfaction or moderated by gender.

This chapter presents available research on HR service quality, nursing job satisfaction, and turnover intention. Furthermore, it discusses the mediator and moderator variables in relation to HR service quality and nursing. This chapter begins with a discussion of the literature search strategy followed by the theoretical foundation. Subsequently, information about the importance of HRM in healthcare organizations,

nursing job satisfaction and turnover intention, and diversity in nursing follows. The chapter closes with a summary of the findings.

### **Literature Search Strategy**

The literature search strategy for this study consisted of an electronic search of databases and articles published between 1995 and 2018. Some of the sources included: relevant literature from Google Scholar, PsycARTICLES, PsycINFO, CINAHL Plus, Medline, and pertinent books on research, nursing, and psychology. In addition, conducting keyword Google searches on terms such as nurses, HR service quality, perceived HRM system effectiveness, empathy, and job satisfaction further supported the search strategy. As a result, the gathered data provided a relation to HR service quality and the intention of nurses to quit working in their current position.

### **Theoretical Foundation**

The ultimate goal of a functioning organization is to increase revenues and their profitability. In order to do so, organizations are integrating their operations and business strategies across services and people and requiring the HRM function to implement policies and procedures that produce effective strategic business outcomes. However, a key question remains regarding what role HRM plays in organizational outcomes and performance. In order to address HRM's role, Bowen and Ostroff (2004) conducted research to "understand how HRM practices, as a system, can contribute to firm performance by motivating employees to adopt desired attitudes and behaviors that, in the collective, help achieve the organization's strategic goals" (p. 204). Ultimately the employees will conform if the signals are distinct, consistent, and concise.

The framework behind Bowen and Ostroff (2004) research was derived from Kelley's attribution theory (1967). The attribution theory is based upon how people use information in the social environment to produce causal explanations (e.g. internal causes or external causes) of the events. According to the attribution theory, people make attributions about cause-effect relationships depending on the degree of distinctiveness, consistency, and consensus. Distinctiveness is the way employees in the workplace perceive HR practices as relevant and determine how their behavior conforms to the rules in the workplace. Distinctiveness has four different metafeatures (visibility, understandability, legitimacy of authority, and relevance) that strengthen desired HRM practices to be readily available, identified, and accepted by all employees who work within the organization. Visibility refers to the degree in which the HR practices are clearly observable. Understandability denotes how easily the content of HRM are comprehended. Legitimacy of authority pertains to the perception of HRM while relevance refers to how the employees perceive the situation.

Consistency in HR practices indicates uniformity of practices across different modalities and over time. Like distinctiveness, consistency has several metafeatures (instrumentality, validity, and consistent HRM messages). Consensus is an agreement across an organization regarding how to implement HR practices. Similar to distinctiveness and consistency, consensus also has metafeatures (agreement among principal HRM decision makers, and fairness).

Delmotte et al. (2012) combined several of the dimensions of each of the qualities of distinctiveness, consistency, and consensus into a HR service quality tool to measure a

strong HRM system that was originally proposed by Bowen and Ostroff. In order to develop this tool Delmotte et al. used the service quality instrument of Parasuraman et al. (1988, 1991) and transformed it into an HR context measuring responsiveness, reliability, and empathy. Responsiveness refers to the willingness of HR to assist internal and external customers in the workplace. Reliability denotes the follow through of HR and empathy signifies how compassionate and understanding HR staff is towards the needs of customers.

Sanders, Dorenbosch, and De Reuver (2008) advance the research of a strong HRM system as they reviewed employee perceptions of HRM on affective commitment. Their study measured the following: affective commitment; content and process HRM; HRM system (distinctiveness, relevance, legitimacy of authority, internal consistency of HRM practices, consensus, agreement between policy makers); and climate strength of 671 employees working in a hospital setting. Employees who perceived the HRM system as distinct and consistent showed positive affective commitment to the organization. In addition, climate strength was also found to be positively associated with affective commitment. Stanton, Young, Bartram, and Leggat (2010) also provide research based upon what Bowen and Ostroff propose as a strong HRM system when they investigated HRM system in local hospitals in Australia. Specifically, this study included hospitals in the city, and rural areas with semi-structured interviews, focus groups, presentations, and discussions to CEO's, Directors, Managers, Executive Team, and the hospital's Board of Management. The findings support hospitals with a strong HRM system in

distinctiveness, consistency, and consensus with the HR practices are important and implemented from the CEO down to the managerial staff.

De Winne, Delmotte, Gilbert, and Sels (2013) provides further research on a strong HRM system. De Winne et al. (2013) investigated HR department overall effectiveness by HRM system characteristics of distinctiveness, consistency, and consensus and through the HR role of strategic partner, change agent, administrative expert, or employee champion of the Belgian managers and Belgian trade union representatives. Coelho, Cunha, Gomes, and Correia (2015) study also examined the strength of an HRM system and created the HRM system strength tool (HRMSQ). The purpose of Coelho et al. (2015) was to identify constructs that measure a strong HRM system and then test those constructs on non-management participants working in an insurance company and a battery manufacturing company. Coelho et al. instrument consisted of 32 items to measure distinctiveness, 12 items measuring consistency, and 8 items to measure consensus. Through confirmatory factor analysis, reliability, convergent and discriminant validity the measures were demonstrated.

This current research will build upon the work proposed by Bowen and Ostroff (2004) of a strong HRM system to determine HR service quality and turnover intention within a nursing population. Although research is available regarding this theory and with nursing personnel, the significant role of HR using the Delmotte et al. (2012) measure of responsibility, reliability and empathy instrument on nurses is nonexistent.



## **Literature Review Related to Key Variables and/or Concepts**

### **Importance of HRM in Organizations**

HRM is the process in most organizations that govern the practices of people.

According to Tissen, Lekanne Deprez, Burgers, and Van Montfort (2010):

HRM is: The entire system of principles, policies and practices which focuses on optimizing the performance and potential of people in organizations, with a view to achieving a dynamic balance between the personal interests and concerns of people and their economic added value. (p. 638)

It is just recently that most organizations understand the significance of having accessible HRM (O'Donnell, Livingston, & Bartram, 2012). Formerly, the perception of HR was as a department who creates and implements policies and procedures (Buchan, 2000).

However, now research specifies the importance of HR in organizations enabling companies to succeed and flourish (Watson, 2005). Although this is understood, Boxall, Ang, and Bartram (2011) said "HRM inevitably affects organizational performance, but what HRM means and how performance is conceived, and attained, are things that the principal actors involved – managers, employees, and the state – shape over time in their particular context" (p. 1504).

The role and functionality of HR is a continued argument among researchers.

Hammond (2007) article argues the negative connotations associated with HR.

Inferences regarding the incompetence of HR staff, towards employees, and the lack of support from the organizations' executive leadership, are some of the detrimental insinuations against HR. However, this article lacked any peer review process, lacked

supporting references, and provided only general information of someone's perception of HR.

There is existing research on HRM effectiveness as well as the barriers that inhibit the process and procedures in HR that consequently affect the organization. Research conducted by Gibbs (2001) on the perception of HRM, based upon the employees' perspective, provided evidence of the impact of HRM on the organization. This study examined HRM systems and the performance of HR staff within the organization based upon the viewpoints of all the employees. According to the study, "where HRM systems are estimated as poor by employees, HR staff are evaluated as being good; where HRM systems are estimated as high by managers and employees, HR staff are evaluated even more highly" (p. 331). This contradicts the research of Legge (1995) who questioned the credibility of HR staff. According to Lawson and Limbrick (1996), the competency of the HR staff should encompass staffing, development, compensation, and Employee Labor Relations. Bell, Lee, and Yeung (2006) stated:

Expertise in the functional areas of HR is critical to being able to deliver state-of-the-art, innovative HR practices that add value, and HR professionals' competence in this area largely determines the credibility and professional respect that they will command from others. (p. 8)

Gilbert et al. (2011) study online manager's enactment of HR practices, relations-oriented leadership behavior, and HR department service quality on affective commitment revealed significance in the hospitality industry, staffing, and IT industry. This study applied the social exchange theory.

Hes (2013) presented a meta-analysis on employees' perception of HRM and found congruent evidence supporting employees' perception of HRM that leads to "desirable employee attitudes and behaviors". This information utilized the constructs of presence, intensity, value, and why attributes and was theoretically based upon the social exchange theory. While the meta-analysis research of Jiang, Lepak, Hu, and Baer (2012) on organizational outcomes (HR outcomes, operational outcomes, financial outcomes) through three HR practices (skill-enhancing HR practices, motivation-enhancing HR practices, opportunity-enhancing HR practices) identified a positive correlation between the known HR practices and its impact on human capital, and employee motivation. This study applied a behavioral perspective of HRM, human capital theory, the ability-motivation model of HRM, and the resource-based view of the current firm under consideration.

Han, Chou, Chao, and Wright (2006) regression analysis on perceived HR effectiveness and HR competencies (e.g. field expertise, business knowledge, change management) of Executives, HR Managers, Line Managers, and non-managerial employees in Taiwanese firms provides significant evidence of the importance of field expertise and change management. The study revealed significant responses from the line managers and employees. Those results support the notion that employees believe HR staff must be competent in HR matters in order for an organization to operate effectively. This study is unique in the way in which it introduces constructs that influence HR processes and the HR personnel whom affect the organization. As research continues to advance in HR, other constructs such as HR service quality are appearing.

An exploration of HR service quality will occur in detail in the next section of this chapter.

### **Service Quality**

Researchers have already utilized service quality indicators in the workplace; however, the association with men in nursing is quite nonexistent (Gilbert et al., 2011; Lee et al., 2012; Uen et al., 2012). With greater emphasis now on HR to help combat the nursing shortage, understanding the perception of HRM practices through service quality is imperative especially if the outcomes can lead to better recruitment and retention efforts instead of employee turnover. Although the effectiveness of HRM is demonstrated in the literature (Meijerink, Bondarouk, & Lepak, 2015) there are still disagreements in the perception of HRM between managerial and non-managerial staff (Bell, Lee, & Yeung, 2006; Gibbs, 2000, 2001).

Uen et al. (2012) presented an argument of the impact of HR service quality as it pertains to the strategic plans within the organization. This research assessed the HR output service qualities of innovativeness, comprehensiveness, and customization; the HR process service quality of reliability and responsiveness; the HR input service quality of structure, physical support, and competence; and the expectations of HR contributions. The findings in the study support a correlation between HR service quality, the expectations of HR contributions and strategic participation. Kim and Han (2012) found job satisfaction was related to perceptions of responsiveness, reliability, and empathy service quality measures. This study was conducted in a long-term care hospital in Korea and unfortunately, the occupations of each of the participants were unknown.

Research measuring service quality exists also in the food service industry (Wildes, 2005; Wildes & Parks, 2005), airline industry (Chiang & Wu, 2014), and post-secondary education institutions (Snipes, Oswald, LaTour, & Armenakis, 2005). Wildes and Parks (2005) research on service quality, the intent to stay employed within the organization, and employee referral utilized the SERVQUAL instrument. The results of the study proved that service quality influenced the employees' intent to remain employed and recommend the job to others. Wildes (2007) study on internal service quality yielded similar results with restaurant workers. Chiang and Wu (2014) research explored the commonalities associated with flight attendants working offsite (away from headquarters, in the air). This study assessed the impact of mediators (supervisor support, coworker support) on job satisfaction and customer orientation. The independent variables were internal service quality (ISQ) and job standardization. The results of the study found:

ISQ and job standardization positively influence supervisor support and coworker support; supervisor support and coworker support influenced job satisfaction; job satisfaction influenced perceptions of customer orientation; supervisor and coworker support mediate ISQ and job satisfaction; supervisor and coworker mediate job standardization and job satisfaction. (p. 2658-2659)

Snipes et al. (2005) research also utilized the SERVQUAL instrument to measure perceived service quality. In addition, this study measured job satisfaction, and empowerment in a post-secondary education institution. The student participants completed the SERVQUAL with answers applicable to their perception of perceived

service quality. Job satisfaction was significant in the service quality measures of the study.

### **Nursing Job Satisfaction and Turnover Intention**

With such a high prevalence of a nursing shortage, employee job satisfaction and turnover intention remains to be an important issue in healthcare management. Job satisfaction is a popular construct in nursing research that warrants continued studies on its relevance in the workplace. According to the 1969 work of Locke (as cited in Weiss, 2002) “job satisfaction is the pleasurable emotional state resulting from the appraisal of one’s job as achieving or facilitating one’s job values”. Locke expounded his definition of job satisfaction in his 1976 work (as cited in Weiss, 2002) and stated, “job satisfaction is a pleasurable or positive emotional state resulting from an appraisal of one’s job or job experiences”. Even today, there is consensus that job satisfaction is the outcome expressed by employee’ feelings about the job (Adams & Bond, 2000; Melnyk, 2006). Kutney-Lee, Wu, Sloane, Aiken, and Fagin (2013) completed a study to investigate how burnout, intent to leave, and job satisfaction of nurses in hospitals in Pennsylvania changed because of the work environment and staffing conditions. The data for the study was collected 1999 to 2006. Hospitals who provided improved nurse environments had nurse employees with less burnout, lower levels of intention to leave, and higher levels of job satisfaction. Another nursing study on job satisfaction and turnover intention is Roulin, Mayor, and Bangerter (2014). Roulin et al. (2014) study is unique in the way in which it examined nursing job satisfaction and intent to leave the hospital. Roulin et al. study looked at nursing job satisfaction from many facets. This study examined nursing

satisfaction at the individual level (e.g. work family conflict, personal accomplishment, and depersonalization), group level (e.g. group cohesion, unit effectiveness), and organizational level (e.g. control, autonomy, and good physician relationship). In addition, this study also examined how moderating variables influenced the nurses' satisfaction and intent to leave the hospital. The results of the study support the hypotheses of job satisfaction in nursing on the individual level, and group level. Meaning, job satisfaction affects nurses on the individual level (burnout and work family conflict) and on the group level (group cohesion and unit effectiveness). In addition, "dissatisfied nurses intend to leave their organization, and that this relationship is moderated by the extent to which they believe that employers allocate enough priority to work related factors" (p. 21).

De Gieter et al. (2010) demonstrated the importance of nurse supervisors and physician's role in nurse turnover intention, job satisfaction, affective commitment, and pay satisfaction. However, nothing in the study reflects the importance or impact HR has on the nurses. De Gieter, Hofmans, and Pepermans (2011) examined how nurses' jobs satisfaction and organizational commitment affect turnover intention. The socio-demographic variables in this study included gender, age, job tenure, and organizational tenure. Within the group of nurses in the study, significant results were on job tenure and organization tenure based upon age. In addition, the older nurses in the study were less likely to leave the organization in comparison to the younger nurses. There were no significant differences found in this study based upon gender.

Coomber and Barriball (2007) summarizes existing research on job satisfaction and turnover intention on nurses dated from 1997 to 2004. The research sought to identify the premise that leads to turnover of nurses by searching the following electronic databases: Cumulative Index to Nursing and Allied Health Literature, Psychology Information, and the British Nursing Index. A common theme emerged from the search including leadership, educational attainment, pay, and stress as the reasons for turnover in nurses.

Shader, Broome, Broome, West, and Nash (2001) research on job stress, work satisfaction, group cohesion, and anticipated turnover of nurses working in an academic medical center found the level of work satisfaction would predict anticipated turnover of the 241 nursing personnel who completed the surveys. Chien and Yick (2016) research on nurses working in a private hospital in Hong Kong found “job satisfaction to be highly negatively correlated with job stress and intention to quit” (p. 108). Larrabee et al. (2003) examines nurse’s job satisfaction and intent to leave the organization through effects of nurse’s attitudes, context of care and structure of care. The results confirmed nurses oftentimes leave organizations because of job dissatisfaction. In addition, the form of job satisfaction that had the most influence on nurses was psychological empowerment.

Of the Taiwanese nurses working in the hospital for the research of Lu, Lin, Wu, Hsieh, and Chang (2002), job satisfaction was found to be significance only in regard to leaving the organization instead of leaving the profession in its entirety. Of the 2,197 nursing participants, Lu et al. (2002) failed to categorize male versus female participants.



Unlike Lu et al. (2002) study, the research of Rambur, Palumbo, McIntosh, and Mongeon (2003) have a high volume of nursing participants 4418, however male nurses only represent 5% of the participants in the study on the nurses' intent to leave and the reason they are leaving. This study utilized nurses working in Vermont. The study found no significance based upon gender; however, men were usually interested in leaving their position because of dissatisfaction.

Studies have already demonstrated the importance of utilizing mediator and moderator variables in research (Boxall et al., 2011; Frazier et al., 2004; Jiang et al., 2012). For instance, Cohen and Wills (1985) study identified how the level of social support (moderator) regulates a persons' ultimate well-being during stressful situations. The research of Guleryuz, Guney, Aydin, and Asan (2008) found job satisfaction to be a mediating variable in its association between emotional intelligence and commitment to the organization. Han and Jekel (2011) research found job satisfaction to mediate leader-member exchange and turnover intention. Trivellas and Santouridis (2014) used job satisfaction as a mediator for higher education service quality and organizational commitment.

Using mediator and moderator variables in nursing research has extended the quality of understanding of factors associated with the success and failures of nursing practices and procedures in organizations. The literature has revealed job satisfaction to be a mediating variable in nursing research. Job satisfaction has served as a mediator in nursing research (Kou et al. 2014; Meeusen, Van Dam, Brown-Mahoney, Van Zundert, & Knape, 2011). In relation to mediator and moderator variables used in nursing research,

Kou et al. (2014) research provides insight into job satisfaction being a mediator for turnover intention of nurses working in long-term care facilities in Taiwan. Shacklock, Brunetto, Teo, and Farr-Wharton (2013) study proposed a mediation model of job satisfaction and turnover intention of nurses working in hospitals in Australia.

Some researchers incorporate HR's high-performance work systems (HPWS) when evaluating employee's overall effectiveness and intention to leave. For instance, Bartram, Casimir, Djurkovic, Leggat, and Stanton (2012) research on nurses discovered correlations in the nurse's intention to leave the organization by examining emotional labor, burnout, intention to leave, and components of HPWS. These studies of HPWS included employment security, selective hiring, extensive training, self-managed teams, information sharing, transformational leadership, high quality work, and reducing status distinctions. Furthermore, burnout mediated the relationship between emotional labor and intention to leave.

Therefore, for the purposes of this study, the most beneficial way to determine how the effectiveness of HRM service quality effects turnover intention in nursing is through the mediator (job satisfaction) and moderation (gender) relationship. Although there could possibly be a relationship between HRM service quality and turnover intention, this study will explore how it interacts with the mediator job satisfaction or has an indirect effect with the moderator of gender upon the dependent variable or turnover intention.

## **Diversity in Nursing**

Men account for 9% of the total nursing workforce within the United States (U.S. DHHS, HRSA, 2013). The low rate of male participation in the nursing profession is impacted by a number of challenges including: discrimination in their education and training (Wolfenden, 2011), stereotypes (Kouta & Kaite, 2011; Twomey & Meadus, 2008, 2016), and gender bias (McKinlay, Cowan, McVittie, & Ion, 2010; Meadus, 2000; Twomey & Meadus, 2008, 2016). Kouta and Kaite (2011) provided a literature review in male gender discrimination among the nursing profession. This review supports the challenges men face during nursing clinical and other forms of training. These challenges can persuade men to discontinue training thereby increasing the shortage of men in the profession. Jinks and Bradley (2004) research compared the perception of gender and other related stereotypes associated with nursing from the perspectives of nursing students' originally in 1992 and then again in 2002. The data collected in 1992 in regard to nursing being a female dominated profession differed only by 19% in 2002. In addition, the results of the female affection questions changed more in 2002 (21%) in comparison to the 1992 data (71%). Although these findings exist, the research of Bartfay, Bartfay, Clow, and Wu (2010) who recruited nursing and non-nursing students to provide their perspective on male nurses reveals how biased men and women still feel about men going into the nursing profession. Specifically, many people feel that women can only provide the appropriate care and nurture to patients.

Not only do men face challenges and discrimination when it comes to their training (Kouta & Kaite, 2011), they face stereotypes while working (Moore &

Dienemann, 2014). Wolfenden (2011) identifies the difficulties men have in the nursing profession that range from education to gender bias within the profession. Rajacich et al. (2013) observed that men in nursing faced similar discrimination challenges. For instance, the men in the focus group reported unfairness with patient population. Specifically the men reported their inability to care for female patients because of fear of legal accusations of inappropriateness of touch. However, this study did report the men participating in the focus group had additional challenges with finding full-time employment, and concerns about management's lack of interest and concern in the nurse's well-being. For those reasons, some of the men in the group considered leaving the nursing profession. It is evident that male nurses report higher intentions to leave the organization than women do nurses (Estryn-Behar et al. 2007; El-Jardali et al. 2009).

Rochlen, Good, and Carver (2009) presented an argument to identify barriers of work and life satisfaction of men working in the nursing profession. This research measured gender role conflict, social support, skillset, gender related work barriers, work satisfaction, and life satisfaction. Of the 174 men who completed the study, significant results were found in the predictors of life satisfaction (gender work related barriers); job satisfaction (gender based work variables); and the predictors of gender related work variables (conflict between work and family, job skillset, and social support from family). According to the research of Rochlen et al. (2009) "work satisfaction of male nurses appears to be affected by their experience of gender-related work barriers and challenges in balancing work and family relations" (p. 53). Andrews, Stewart, Morgan, and D'Arcy (2012) research compared nursing in rural and remote areas in Canada based upon

gender. The multiple regression analysis in this study was committed in identifying any association of gender and work satisfaction and according to the results of the study “gender was not found to be a predictor of work satisfaction” (p. 567). Although the findings in this study are significant, the study is limited in the total number of participants who worked in a hospital. Only 19.1% of the male nurses worked in the hospital. Moore and Dienemann (2014) also provided the male perspective of nursing. Moore and Dienemann (2014) study on job satisfaction and career development of men in nursing provided insight into the perspective of men who entered nursing as a chose, out of convenience, or as a 2<sup>nd</sup> career. The job satisfaction categories of measurement in this study included satisfaction with supervisor, colleagues, pay, advancement, security, and opportunity. This study found the men who went into nursing for convenience had a higher rate (14.3%) of leaving than the men who chose nursing, and the second career nurses. Unfortunately, this study fails to reveal any true significant differences in their levels of job satisfaction.

According to McMillian, Morgan, and Ament (2006), woman nurses who interacted more and more with male nurses developed a level of acceptance of those men into a dominated women’s profession. Tracey and Nicholl (2007) find agreement with McMillian et al. (2006) in that female acceptance of men as nurses; however, some concerns arise with the ease in which men gain promotions quicker than the female nursing staff. Although evidence exists regarding the barriers men face in nursing including job satisfaction, the question remains concerning the importance of HR service quality and turnover intention.

## Summary and Conclusions

The nursing shortage is a problem that not only affects the US, but is also a problem globally. Many hospitals as well as other organizations who employ nurses are now seeking ways to identify why the nursing shortage exist and solutions for addressing the nursing shortage especially in the number of males in the nursing profession. One way in which organizations have investigated the nursing shortage is through job satisfaction and turnover intention. However, research is limited in HR's role in nursing job satisfaction and turnover intention. The importance of understanding the relationship HR has with its' employees can determine the effectiveness of an organization (Bowen and Ostroff, 2004). This study used Bowen and Ostroff (2004) work of the strength of a HRM system to determine the relationship HR has with nursing personnel and ultimately the nursing shortage. Although research is now available with regards to Bowen and Ostroff theory (e.g. Li, Frenkel, & Sanders, 2011; Sanders, Dorenbosch, & Reuver, 2008; Stanton, Young, Bartram, & Leggat, 2010) the only study to produce and validate an instrument to test the theory is Delmotte et al. (2012), which was used in this current study. The assertions made in this literature review reveals the importance of job satisfaction in the workplace; however, any correspondence of the association of the HR component of service quality, the mediator job satisfaction, and gender the moderator has on the intention to quit in the nursing occupation has yet to be discovered.

Chapter 3 is comprised of the research design, methodology, and threats to validity. It includes a thorough review of recruitment procedures, survey instruments,

research questions and hypotheses. Chapter 3 concludes with threats to validity, ethical considerations, and a summary of the chapter.

## Chapter 3: Research Method

### **Introduction**

The nursing profession represents a large workforce; however, there is still an existing nursing shortage within the United States and globally (Lavoie-Tremblay et al., 2010; Nooney et al., 2010). There are several factors that may contribute to the nursing shortage, including education and training (Roulin et al., 2014; Zinn et al., 2012), retirement of Baby Boomers, and lack of advancement in the profession (Rajacich et al., 2013). Consequently, the nursing shortage has a rippling effect that influences the recruitment and retention of hospital nursing personnel.

Additional direction and support from HR are necessary in order for a healthcare organization to function and thrive. However, research surrounding the significance and beneficial aspects of HR remains a debated topic. According to Gibb (2001), “employee attitudes towards HRM are likely to be negative as the experience of HRM is likely to be one of poorly conceived and executed policies and procedures unconnected with what employees want and need within organizations” (p. 321).

With so many different individual beliefs about HR and continued difficulties associated with the nursing shortage, the results from this study will add to current research regarding the impact HR has on turnover intention of nursing personnel. The purpose of this nonexperimental study was to determine how nurses perceive the services they receive from HR and if those services influence their employment in the hospital setting. A secondary purpose of this study was to determine if job satisfaction and gender influenced the relationship of registered nurse perceptions of HR service quality and



turnover intention. This chapter includes a description of the research design, population, sampling, instruments and materials, data collection, data analysis, research questions and hypotheses, ethical considerations, and summary.

### **Research Design and Rationale**

This study used a quantitative nonexperimental research methodology to examine the influence HR service quality, gender, and job satisfaction had on registered nurses' intent to leave their current position within the hospital. Quantitative research designs are used in diverse research that include HR and organizational management (Baruch & Holtom, 2008), and within hospital settings (Chen & Lin, 2013). The overall design in a quantitative study helps the researcher identify a problem based upon a theoretical framework, hypothesize and test a solution, analyze the data through statistical techniques, and accept or reject the hypothesis.

According to Leedy and Ormond (2001) quantitative research “seek explanations and predictions that will generate to other persons and places. The intent is to establish, confirm, or validate relationships and to develop generalizations that contribute to theory” (p. 102). The objective of this study was to determine whether registered nurses' perception of HRM service quality affects their intention to leave an organization with job satisfaction being a mediator and gender being the moderator of the relationship between HRM service quality and turnover intention. The independent variables of the study were HRM service quality indicators of responsiveness, reliability, and empathy while the dependent variable was intention to leave the organization.

This nonexperimental cross-sectional research used a survey to collect data. According to Williams (2007), the cross-sectional research design can be used to conduct quantitative research on HR service quality and turnover intention of the nurses. Surveys allow research to be distributed to various nursing personnel at one given point in time. Shaughnessy, Zechmeister, and Zechmeister (2012) identified characteristics associated with survey research such as sampling and predetermined questions as an “effective strategy for examining people’s thoughts, opinions, and feelings” (p. 140). This study used a sample of the nursing population in the state of Maryland in order to make generalizations or inferences that can affect the nursing workforce based upon the results of the study.

## **Methodology**

### **Population**

The target population for this study was licensed registered nurses who work in a hospital within the state of Maryland. According to the BLS (USDOL, 2015), registered nurses make up the largest occupational category in the healthcare industry, comprising about 2.7 million nurses. Furthermore, about 1.5 million of those nurses work in a hospital setting. However, the state of Maryland projects to have a severe nursing shortage by the year 2025 with a projected difference needed of 12,100 nurses (U.S. DHHS, 2014).

### **Sample and Sampling Procedures**

This research used the nonprobability convenience sampling method to get nurses to participate in the study. The population of nurses for this study was licensed registered

nurses working in hospitals in Maryland who have Internet access. More specifically, nurses were recruited to participate in this study who work in hospitals within the three largest counties in Maryland: Montgomery County, Prince George's County, and Baltimore County. It is economically impossible for this study to recruit 2.7 million nurses to this study. That is why it is imperative to collect data from an appropriate nursing sample size to ensure generalizability across the nursing population. The primary condition for this study was that nursing participants had to be licensed in the State of Maryland, work in a hospital, work in a non-management capacity, and have been employed by that hospital for at least 1 consecutive year. No other healthcare professionals were included in this study. This study was only interested in nurses who worked in hospitals in the state of Maryland. A full description of recruitment procedures will follow later in the chapter.

### **Power Analysis/Sample Size Calculations**

A power analysis allows the researcher to be able to determine any statistical inferences from the data collected during the study. According to Cohen (1990), "statistical power analysis exploits the mathematical relationship among these four variables in statistical inference: power, alpha, sample size, and effect size" (p. 98). To determine an appropriate sample size for this study, a statistical power analysis with desired alpha, effect size, and power was determined.

The power analysis for this study was computed using G\*Power 3.1.9.2 software and is available free online. There are several different types of analysis offered by G\*Power 3.1.9.2. For the purposes of this study, the G\*Power 3.1.9.2 program can

analyze a priori analysis. It is within a-priori analysis that the sample size (N) needed for the study was determined. In order to calculate the sample size for this study, you must determine the statistical power, alpha, and effect size. The power in the study is the probability of detecting the relationship among the variables in the study and the likelihood of committing a type II error (probability of incorrectly retaining the null hypothesis). The alpha level in the study is the level of risk researchers are willing to accept as a plausible explanation of the effect of the study. The effect size is how large or effective the relationship is between your variables in the study. Based upon our multiple regression study that seeks to determine any association the independent variables of HRM service quality (responsiveness, reliability, and empathy) has on the dependent variable (turnover intention), a priori was computed to get the sample size. Using the G\*Power 3.1.9.2 statistical test of Linear multiple regression, a fixed model was selected with  $R^2$  deviation from zero. An a priori analysis required the alpha, power, and effect size. The alpha was set at 0.05 with a statistical power of 0.80 based upon existing nursing research (Applebaum, Fowler, Fiedler, Osinubi, & Robson, 2010; Giallonardo, Wong, & Iwasiw, 2010; Kuo et al., 2014)

In order to determine the appropriate effect size for the current study, Vacha-Haase, and Thompson (2004) recommended reviewing existing literature that is relevant to our study of HR service quality and turnover intention of nurses. The research of Rochlen, Good, and Carver (2009) found significance in the multiple regression analysis to determine nursing predictors of job satisfaction with  $R^2 = 0.19$ . Initially Rochlen et al. (2009) research was to identify masculine role conflict, social support, work related

skills, gender-related work barriers, work satisfaction, and life satisfaction on the male nursing participants. Ultimately, this study found “work satisfaction of male nurses appears to be affected by their experience of gender-related work barriers and challenges in balancing work and family relations”. In De Geiter et al. (2010) research, statistical significance in psychological rewards predicted turnover intention ( $R^2 = 0.19$ ) and job satisfaction ( $R^2 = 0.24$ ). In the nursing research of Giallonardo, Wong, and Iwasiw (2010) a medium effect size was found with nurses’ job satisfaction and work engagement ( $R^2 = 0.15$ ), and work engagement and authentic leadership ( $R^2 = 0.20$ ).

Based upon the existing research on nursing, this study utilized a medium effect size of 0.15. The total sample size based upon using the G\*Power 3.1.9.2 software was  $N= 77$ . Reviewing additional research for sampling size based upon the calculation of this study, the mediator research of Walker and Campbell (2013) and Maier, Laumer, Eckhardt, and Weitzel (2012) emulate similarities of this current study of HR service quality and turnover intention. Walker and Campbell (2013) research on nurse work readiness as the independent variable and intention to remain as the dependent variable operated with job satisfaction and work engagement being the mediators of the study. The sample size of this study was 96 nurses. The multiple regression analysis of the study found significance with job satisfaction and work readiness with  $R^2 = 0.16$ . In addition to work engagement and work readiness  $R^2 = 0.20$ . Job satisfaction mediated the relationship between work readiness and intention to remain within the organization. However, the relationship was small with the  $R^2 = 0.13$ . Maier et al. (2012) research on HRIS implementation with job satisfaction mediating the relationship between turnover

intention based upon employee attitude found the  $R^2 = 0.23$  of employee job satisfaction. The total sample size of the study was  $N = 106$  of HR staff who completed the questionnaires. Other mediation and moderation literature reveals sample sizes that range from 101-150 participants (Fritz & MacKinnon, 2007). Based upon these findings, this study minimum sample size was 77 participants, however 83 nurses participated in this study.

### **Recruitment Procedures and Data Collection**

This study solicited participation from registered nurses who work in hospitals within the State of Maryland via email communication and through social media tools. The social media tools include Facebook, LinkedIn, and Twitter. In addition to the social media tools, another method to acquire licensed registered nursing participants working in hospitals located in Maryland was through email communication to the Maryland Nurses Association. The intent was to reach the nurses via the internet who work in hospitals in the State of Maryland to complete the survey based on their own experience with HR service quality and the possible intent of leaving the organization. Only nurses who had access to the internet, work in a hospital in the State of Maryland, and have a Maryland nursing license were able to participate in this study. This study recruited only registered nurses licensed working in Maryland hospitals, specifically within the three Maryland counties already referenced above. Other healthcare professions such as Licensed Practical Nurses (LPNs) were not included in this study.

The recruitment effort focused on nurses by using social media outlets. In addition, nursing associations or organizations such as the Maryland Nurses Association

received an invitation for their members to participate in this study. The associations and organizations received email communication to solicit their members to participate in the study. The invitation to the Maryland Nurses Association to solicit its members transpired through email. A follow-up email occurred two weeks after the initial invitation giving the members the additional opportunities to complete the surveys. Participants completed the surveys for this study in SurveyMonkey. The nursing participants who voluntarily consented to complete the questionnaires in the study first read, and acknowledge the informed consent which is found in Appendix E. The informed consent gave a brief description of the study. A sign of the nursing participants agreeing to the study occurred if the participants clicked yes at the bottom of the page of the consent form. At that point, the survey began, and the participants moved forward and completed the surveys for the study. If the nursing participants click no on the consent form, the study was immediately terminated. Based upon this non-experimental research design, no other follow-up procedures such as follow-up interviews or treatments are necessary.

Prior to the data being collected, this study acquired approvals from the Institutional Review Board (IRB) at Walden University to conduct the study on HR service quality and turnover intention of nurses. The IRB approval number for the study was 08-27-18-0304113. This approval was necessary in order to protect the rights of the nursing participants within the study. Upon obtaining IRB approvals, the data proceeded to be collected as outlined above from social media outlets and the Maryland Nurses Association.

## **Instrumentation and Operationalization of Constructs**

The study used measures of HR service quality, and job satisfaction to determine turnover intention of nurses working in hospitals in Maryland. Data collection using Delmotte et al. (2012) instrument for HR service quality; job satisfaction measures from Hackman and Oldham (1976) research; and intention to leave measures from Ang et al. (2013), occurred within this study. What follows is a description of the tools that measured HR service quality, job satisfaction, and turnover intention of nurses.

### **HR Service Quality Measure**

In order to determine HR service quality and the turnover intention of nurses working in Maryland hospitals, this study utilized three tools. To measure the independent variable of HR service quality, this study utilized Delmotte et al. (2012) measure of responsiveness, reliability, and empathy instrument. Delmotte et al. created a tool to measure perceived HRM system strength to reinforce the research of Bowen and Ostroff (2004) who determined a strong HRM system would be consistent with employees who have high distinctiveness, consistency, and consensus of HR signals. Belgian Trade Union Representatives and Line Managers were the participants in the Delmotte et al. study. In order to develop the instrument, Delmotte et al. initially started with identifying 68 constructs necessary “to measure the perceived effectiveness of the HR process-related features” (p. 1486). The items were then “combined to form scales” (p. 1486). The scale evaluation was the final step to evaluate the items in terms of reliability and validity. According to Yang (2005), “factor analysis is a statistical procedure that explains a set of observed variables in terms of a small number of



hypothetical variables, called factors (p. 182)”. The two-factor analysis techniques used in the Delmotte et al. study consisted of exploratory factor analysis (EFA) for the distinctiveness, consistency, and consensus dimensions; and confirmatory factor analysis (CFA) to evaluate service quality.

The HR Service Quality tool created by Delmotte et al. (2012) is an 11-item questionnaire adapted from Parasuraman, Berry, and Zeithaml (1988, 1991) SERVQUAL instrument. Delmotte et al. altered the SERVQUAL to fit within a human resource environment that could adequately measure perceived HRM system strength. This instrument measures three service constructs of responsiveness, reliability, and empathy. An example from the responsiveness construct is the following: “HR staff performs HR services punctually and accurately” (Delmotte et al., 2012, p. 1494). The items from the HR service quality instrument measuring responsiveness are questions 1, 2, 8, and 9. An example from the reliability construct is the following: “The HR department guarantees error-free administrative HR service” (Delmotte et al., 2012, p. 1494). The items from the HR service quality instrument measuring reliability are questions 3, 4, 5, 7, and 10. Furthermore, an example of the empathy construct in the HR service quality instrument is the following: “Employees are only numbers to HR staff”. The items reflecting empathy in the HR service quality instrument are questions 6 and 11. Of the two individual groups who participated in the Delmotte et al. study, the following  $\alpha$ 's was found for line managers of 0.89 and the trade union representatives of 0.91. Permission to utilize this tool is found in Appendix A.

Gilbert et al. (2011) study was also found to use the SERVQUAL instrument to measure HR service quality. The purpose of the study was to determine line managers' enactment of HR practices; line managers' relations-oriented leadership behavior; and HR service quality on affective commitment. The participants in this study worked in various careers (restaurant and retail, staffing, IT) and lived in Belgian/Luxembourg with a sample size of 929. The HR service quality measures study had coefficient  $\alpha$  of 0.73 for empathy, 0.79 for responsiveness, and 0.67 for reliability that are acceptable  $\alpha$ 's (Kernis & Goldman, 2006). Gilbert et al. (2011) used confirmatory factor analysis and regression analysis for this study. The findings of the study were positive in relation to employee perception of line manager's enactment of HR practices, relations-oriented leadership behavior, and perception of HR service quality and affective commitment. However, no statistical significance occurred with HR department's service quality and bad enactment of HR practices, nor poor relations-oriented leadership behavior within the study.

Snipes, Oswald, LaTour, and Armenakis (2005) completed a study to measure the significance of job satisfaction and employee empowerment on service quality. This study utilized the SERVQUAL instrument to measure empathy, reliability, tangibles, and overall service quality. The SERVQUAL measures were answered on a 7-point Likert scale with ratings of 1 to 7 with seven on the Likert scale meaning *much better than I expect*. The SERVQUAL had a reported Cronbach's alpha of 0.97, 0.95, and 0.79 respectively for empathy, competency and reliability, and work environment tangibles within this study. The results of the study found significance in how job satisfaction

facets (customers, benefits, and work itself) aids in predicting service quality. Employee empowerment was significant in terms of its pathway through job satisfaction; however, there were no significant results in relation to empowerment and service quality.

### **Job Satisfaction Instrument**

In order to identify the significance of the mediator variable of job satisfaction, it was measured using two questions from the research of Hackman and Oldham (1976). The two questions from the instrument were the following: "I am very satisfied with my job" and "I am generally satisfied with the kind of work I do in my job. This study was only interested in using two of the job satisfaction questions from the Hackman and Oldham (1976) research. Previous research studies have shown that altering the original instrument or using a single item measure of job satisfaction will not alter the research findings (De Geiter, De Cooman, Pepermans, & Jegers, 2010; De Geiter, Hofmans, & Pepermans, 2011; Turnley and Feldman, 2000). Permission to use this tool is found in Appendix B.

De Geiter, Hofmans, and Pepermans (2011) also used the same two questions from the original Hackman and Oldham (1976) research. They measured the questions on a 7-point Likert scale with 1 signifying totally disagree to 7 signifying totally agree. The Cronbach alpha in De Geiter et al. (2011) research was .85 with the nursing participants within their study. The previous research of De Geiter, De Cooman, Pepermans, and Jegers (2010) found a Cronbach alpha of 0.81 utilizing the two-item question of job satisfaction for their sample of nurses. Turnley and Feldman (2000) study

also measured job satisfaction of various business occupations based upon Hackman and Oldham (1976) study. The Cronbach alpha for job satisfaction was 0.70 in this study.

### **Intention to Leave Instrument**

Finally, in order to determine turnover intention, this study used Ang et al. (2013) research questionnaire. Three questions from Ang et al. research measured nurses' intention to leave the organization. An example of the intention to leave question is "I often think of quitting the organization" (Ang et al., 2013, p. 3098). Based upon the Ang et al. study, the internal consistency  $\alpha$  ranged from 0.889 to 0.941. The three intentions to leave items chosen in the study of Ang et al. captured the employee true intentions of quitting which leads to turnover intention. Permission to use this tool is found in Appendix C.

Previous research has revealed similar internal consistency in the intention to leave questions supporting the questions have good reliability estimates. One study by Yin-Fah, Foon, Chee-Leong, and Osman (2010) of turnover intention in private sector workers was 0.90. Likewise, Carmeli and Weisberg (2006) study had a 0.90 Cronbach  $\alpha$  with participants from Financial Officers, Lawyers, and Social Workers. Another study by Castle, Engberg, and Anderson (2007) on nursing home administrators demonstrated the Cronbach's  $\alpha$  coefficient of 0.86. Furthermore, Tummers, Groeneveld, and Lankhaar (2013) research also supports the Cronbach's alpha of 0.85 in the nurse's intention to leave. Of the research articles previously cited above, Tummers et al. (2013) was the only research study that utilized more than three intention to leave questions. The other studies used three questions to measure intent to leave because of good reliability, and the

questions in general captured intent to leave as it was initially meant from the research of Mobley, Horner, and Hollingsworth (1978).

**Instrument scoring.** The surveys used in the study addressed three purposes. The first purpose was to examine the nurses' perceptions of HRM service quality using Delmotte et al. (2012) measure of responsiveness, reliability and empathy instrument. The second purpose of this study was to determine if job satisfaction mediated the relationship of nurses' perception of HRM service quality utilizing Hackman and Oldham (1976) survey questions on job satisfaction. The third purpose of the study was to discover if gender moderated the relationship between HRM service quality and turnover intention of nurses using the research instrument from Ang et al. (2013). The nursing participants for the study responded to the HR service quality instrument on a 5-point Likert scale, job satisfaction on a 7-point Likert scale, and intention to leave survey on a 5-point Likert scale.

In Delmotte et al. (2012) measure of responsiveness, reliability, and empathy instrument, questions 1-2, and 8-9 identified the nurses' perception of HR's responsiveness. Questions 3-5, 7, and 10 of the same instrument identified the reliability to perform the HR services and finally questions 6 and 11 determined the empathy construct of HR service quality. Delmotte et al. measure of responsiveness, reliability, and empathy instrument used exploratory factor analysis to create the questions in the scale. They utilized the SERVQUAL instrument from Parasuraman et al. (1988, 1991) and adjusted the questions to fit an HR content. Based upon this research the scores for responsiveness, reliability, and empathy were calculated by averaging the scores of each

item measuring each of the three HR constructs separately and then divided by the total number of items in each of the constructs. In order to determine the overall service quality, the summed scores for each of the constructs (responsiveness, reliability, empathy) were summed and divided by 3 (total number of constructs being addressed in the study).

There were two job satisfaction questions extracted from the research of Hackman and Oldham (1976) used in this study. The questions from the study included, “I am very satisfied with my job; and I am generally satisfied with the kind of work I do in my job”. Each of these questions were answered on a 7-point Likert scale which ranged from (1) disagree strongly, to (7) meaning agree strongly. These questions captured each of the nurses' evaluation of their general job satisfaction. Each of the scores were averaged to produce a summary score for job satisfaction.

The intention to quit instrument utilized three questions extracted from the research of Ang et al. (2013). The questions include, “I often think of quitting the organization; I think of searching for another position with another organization; I often think of leaving the organization within the next year” (Ang et al., 2013, p. 3098). Each of these questions were answered on a 5-point Likert scale, which ranges from 1, meaning entirely disagree to 5, meaning entirely agree. The nursing participants could earn a minimum of 3 points or a maximum of 15 points on this intention to quit instrument. The higher the responses the greater the possibility of the nurses intending to leave.

### **Research Question and Hypothesis**

This study sought to answer three research questions with accompanying null and alternative hypotheses:

*RQ1:* Do nurses' perceptions of HRM service quality indicators of responsiveness, reliability, and empathy influence turnover intention?

*H<sub>01</sub>:* Nurses' perceptions of HRM service quality assessed through the service quality indicators of responsiveness, reliability, and empathy will have no significant influence on turnover intention.

*H<sub>a1</sub>:* Nurses' perceptions of HRM service quality assessed through the service quality indicators of responsiveness, reliability, and empathy will significantly influence turnover intention.

*RQ2:* Does job satisfaction mediate the relationship between nurses' perceptions of HRM service qualities of responsiveness, reliability, and empathy and turnover intentions?

*H<sub>02</sub>:* Job satisfaction will not significantly mediate the relationship between nurses' perceptions of HRM service qualities of responsiveness, reliability, and empathy and turnover intentions.

*H<sub>a2</sub>:* Job satisfaction will significantly mediate the relationship between nurses' perceptions of HRM service qualities of responsiveness, reliability, and empathy and turnover intentions.

*RQ3:* Does gender moderate the relationship between nurses' perceptions of HRM service qualities of responsiveness, reliability, and empathy and turnover intentions?

*H<sub>03</sub>*: Gender will not significantly moderate the relationship between nurses' perceptions of HRM service qualities of responsiveness, reliability, and empathy and turnover intentions.

*H<sub>a3</sub>*: Gender will significantly moderate the relationship between nurses' perceptions of HRM service qualities of responsiveness, reliability, and empathy and turnover intentions.

### **Data Analysis Plan**

This study used a multiple regression analysis to assess the relationship between the independent variable of HR service quality on the dependent variable of turnover intention using SPSS statistical software 23. Job satisfaction served as a mediator variable and gender served as a moderator variable. Several assumptions in a multiple regression analysis must be satisfied to determine the validity and reliability of the data collected in the study. The first assumption is of linearity between the criterion variable of turnover intention to the predictor variables of HR service quality. This is necessary in order to reduce Type I and Type II errors in the study (Osborne & Waters, 2002). The second assumption is that no multicollinearity should exist in the data. If the study has moderate to large correlation among the predictor variables of HR service quality, it could be difficult to determine the significance of each of the predictor variables separately. The third assumption of homoscedasticity in which the variance of errors in the study will be equally distributed amongst the predictor variables of HR service quality in order to limit the Type I error. The fourth assumption involves normality. According to Tabachnick and Fidell (2007), "the assumption of normality is that errors of



prediction are normally distributed around each and every predicted dependent variable score” (p, 127).

This research used the mediation and moderation research of Baron and Kenny (1986) in order to determine if a mediation and moderation effect took place. In order to answer RQ1, a simple regression analysis will show if HR service quality correlates with the dependent variable of turnover intention. A Baron and Kenny mediation analysis was conducted to assess if the mediator (job satisfaction) will mediate the relationship between HR service quality and turnover intention in order to satisfy RQ2. This research then conducted another regression analysis to determine if HR service quality (IV) correlates with job satisfaction (mediator). The next step was to determine how job satisfaction (mediator) affects the outcome or dependent variable (turnover intention). Assuming significant relationships are found with the previous steps, the research will continue with another step and identify if HR service quality and job satisfaction (mediator) can predict turnover intention. A Sobel test of significance was also performed to determine the extent to which job satisfaction contributed to the total effect on turnover intention.

In order to examine RQ3, a Baron and Kenny moderation analysis was conducted to assess if gender moderates the relationship between the HR service quality indicators of responsiveness, reliability, and empathy (independent variables) and turnover intention (dependent variable). This research followed Case 2 mediation from the research of Baron and Kenny (1986). According to Baron and Kenny (1986), a moderator will specify the association of the independent variable to the dependent variable.

Specifically, our research sought to determine if the moderator gender moderates the relationship between HR service quality and turnover intention of nurses. In SPSS, the moderator was dummy coded, the variables were centered, and an interaction variable was created to determine the effects between HR service quality and gender.

### **Threats to Validity**

It is necessary for researchers to take every measure necessary to ensure the validity of the study. According to Drost (2011), there are several types of validity that could be of concern to researchers that includes statistical, internal, and external validity (p. 115). According to Cook and Campbell (as cited in Drost, 2011) statistical validity pertains to the conclusions drawn from the research are accurate based upon appropriate alpha levels and other statistical tools necessary in a study. Based upon existing nursing research and to control for statistical validity, the alpha ( $\alpha$ ) = 0.05; confidence level of 0.80; and medium effect size of 0.15 were utilized. Internal validity refers to the appropriateness of the research design and if the study truly measures what it was intended to measure. There are several threats to internal validity that can occur in a study. Those threats include history, maturation, testing, instrumentation, regression, selection, and mortality which will be controlled for in this study. Every measure to ensure the reliability of each instrument used in the study was taken in order to assist future researchers in duplicating the study. External validity refers to the extent to which results are generalizable to other situations or populations (Campbell & Stanley, 1963; Drost, 2011). This study was completed by nurses who work in a hospital setting who care for the daily needs of patients. Although the results should be generalizable across

other situations and populations, there could be some threats to future research based upon nursing practice settings, and nurse specialties.

### **Ethical Procedures**

In order to adhere to the highest level of professionalism in research and to avoid any unethical violations when using human participants, this study followed the guidelines from Walden University and obtained approval from the IRB before proceeding to collect data. The approval number provided by Walden University IRB for this study was 08-27-18-0304113. Before completing any of the questionnaires, the nursing participants read and acknowledge the informed consent form (see Appendix E). This informed consent form provided a brief description of the study that included the purpose of the study and the procedures. In addition, the informed consent form identified the risks and benefits associated with participating in the study. Furthermore, the informed consent form also disclosed the study was strictly on a volunteer basis. A sign of acknowledgment to the informed consent and the terms of the study involved the nursing participants clicking yes on the consent button located on SurveyMonkey. That gesture was proceeded by the nursing participants commencing with the studies questionnaires.

In order to maintain the confidentiality and privacy of each of the nursing participants, this study did not have any personal identifiable characteristics that could link back to any of the nursing participants when completing the questionnaires on SurveyMonkey. The data from the study will reside on SurveyMonkey's database for one year. The researcher will then delete the data from SurveyMonkey's database by

following the privacy and legal guidelines on the SurveyMonkey's website at the appointed time. The researcher will then only keep the data encrypted on a personal computer for an additional 5 years before ultimately destroying the data.

### **Summary**

The intent of this chapter was to provide a framework in which the research methodology presented addressed the relationship of HRM system effectiveness through HR service qualities indicators of responsiveness, reliability, and empathy of nursing personnel. In addition, this study also addressed whether job satisfaction mediated the relationship in the HR service quality indicators of responsiveness, reliability, and empathy to the turnover intentions of nurses. Furthermore, this study examined if gender moderated the relationship between the HR service quality indicators of responsiveness, reliability and empathy to nurses turnover intention. The hypothesis of the study included a positive association between the HR service quality indicators, job satisfaction, and turnover intentions of those nurses. Another hypothesis in the study was a negative association between the moderator variable of gender and nurses' turnover intention.

A collective group of nursing participants voluntarily engaged in this study through a purposive sampling statistical technique of selection. Those nurses met the criteria for the study, which included working in a hospital setting. Data collection occurred using Delmotte et al. (2012) measure of responsiveness, reliability and empathy, job satisfaction, and intent to leave the organizations questionnaires. Walden University's IRB approved this study and the results of this study are located in Chapter 4.

## Chapter 4: Research Methods

### **Introduction**

As the nursing shortage continues to be problematic, hospitals must determine how to alleviate the shortage in order to care for the sick. The present study focused on survey responses from nursing participants who were licensed and worked in hospitals in the state of Maryland. The purpose was to determine how registered nurses' perceptions of HR service quality affect turnover intention through the mediation and moderation variables of job satisfaction and gender. The surveys were comprised of Delmotte et al. (2012) measures of responsiveness, reliability, and empathy, job satisfaction measure, and turnover intention measure. The results from the HR service quality measure were averaged from three submeasure indicators of responsiveness, reliability, and empathy to create an overall HR service quality measure. The results of the study offer insight into the impact HR has on job satisfaction and turnover intention of nursing personnel.

To answer RQ1, a regression analysis was used to determine registered nurses' perceptions of HR service quality on turnover intention. The second research question employed the Baron and Kenny mediation model to detect if job satisfaction mediated registered nurses' perceptions of HR service quality and turnover intention. In RQ3 analysis, registered nurses' perception of HR service quality and turnover intention was analyzed to determine if gender moderated the relationship between HR service quality indicators and turnover intention. The null hypothesis for this research question was that gender would not statistically moderate the relationship between HR service quality and turnover intention.

In this chapter, information pertaining to the data collection such as time frame and recruitment response rates are discussed. In addition, discrepancies in data collection from Chapter 3 are discussed. Finally, the results of the study including statistical analysis findings are presented.

### **Data Collection**

Data was collected from licensed registered nurses working in hospitals in Maryland. Participants were recruited through social media outlets such as Facebook, LinkedIn, and Twitter, and participants completed an online survey through SurveyMonkey. Another recruitment method in this study was to contact the Maryland Nurses Association to recruit nursing participants. Initial contact with the Maryland Nurses Association was through email correspondence with the presidents of the local chapters of the Maryland Nurses Association. Through those communications, presidents were able to forward to their nurses information pertaining to the study. That information included Walden University IRB approval for this study, the informed consent form, and the link which nursing participants used to complete surveys. A follow up email occurred 2 weeks after the initial invitation extending the opportunity for registered nurses to participate in this study.

A total of 92 surveys were completed by nursing participants. Of those, nine cases were eliminated because the nurses only provided consent and/or failed to answer any of the questions in the surveys. The final sample for this study consisted of 20 males and 63 females. The difficulties in finding male nursing participants has been noted in previous research (Andrews et al., 2012, and Roulin et al., 2014). Upon reviewing the

data, it was found that more female nurses possessed master's degrees, had more years of nursing experience, and remained employed with their current hospital longer than their male counterparts (see Table 1).

Table 1

*Demographic Summary of Nursing Sample*

Demographic Nursing Information		Male	Female	Frequency	Percentage
Gender					
Male		20	-	20	24.1
Female		-	63	63	75.9
Education					
Diploma		0	1	1	1.2
Associates		1	8	9	10.8
Bachelor		16	28	44	53.0
Masters		2	22	24	28.9
Other		1	4	5	6.0
Years as a RN					
0-5		4	12	16	19.3
6-10		10	4	14	16.9
11-15		2	16	18	21.7
16-20		1	9	10	12.0
>21		3	22	25	30.1
Years in Current Hospital					
0-5		9	26	35	42.2
6-10		7	9	16	19.3
11-15		2	11	13	15.7
16-20		1	5	6	7.2
>21		1	12	13	15.7

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Based upon the G\*Power 3.1.9.2 software, the minimum number of nurses needed to participate in this study was 77. Although 83 nurses participated in the study, this number only provides a small portion of the 1.5 million nurses working in the hospital setting.

### Results

Using SPSS version 25, Cronbach's alpha was computed to determine the internal consistency and reliability of Delmotte et al. (2012) measures of responsiveness, reliability, and empathy instrument. The results of the analysis of Cronbach's alpha for overall HR service quality was .895. The means and standard deviations for each of the instruments were also calculated (see Table 2).

Table 2

#### *Descriptive Statistics for Variables*

Variable	N	Min	Max	M	SD
Overall HR Service Quality	83	1.33	5.00	3.14	.76
Job Satisfaction	83	1.50	7.00	5.26	1.31
Turnover Intention	83	1.00	5.00	2.78	1.14

#### **Assumptions for Multiple Linear Regression**

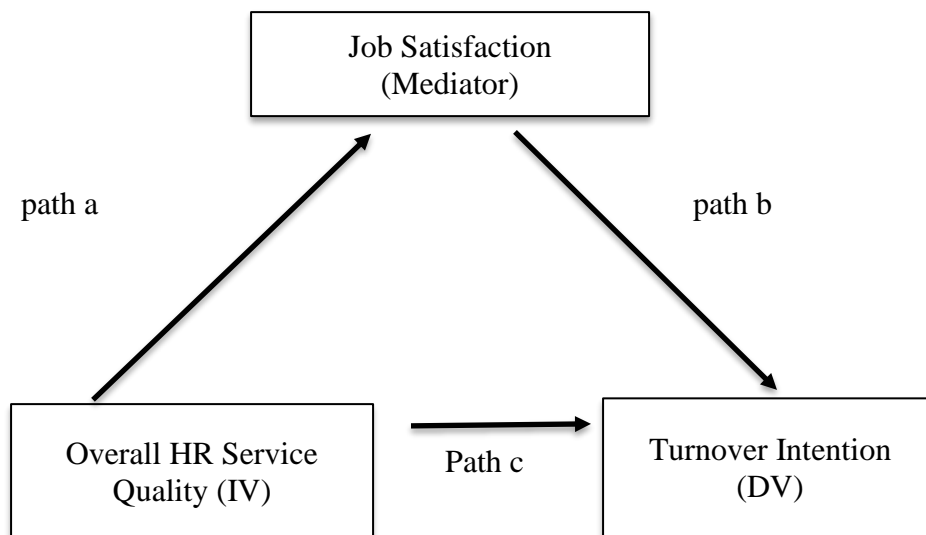
To answer the research questions, a multiple linear regression analysis was used. However, before running the regression analysis, certain statistical assumptions regarding multicollinearity, normality, linearity, homoscedasticity, and independence of residuals were evaluated. If the assumptions were met, inferences were drawn. However if any of

the assumptions were violated the interpretation of the analysis may be incorrect or misleading.

Multicollinearity occurs when there is a high correlation between the independent variables of the study. If multicollinearity exists, statistical inferences are difficult to determine. Multicollinearity of the predictor or independent variables was assessed by reviewing the tolerance and variance inflation factor (VIF) values of the regression analysis. The tolerance measure should be  $>.20$ , while the VIF scores should be  $<10.0$  (Thompson, Kim, Aloe, & Becker, 2017). The tolerance and VIF scores for HR quality responsiveness (.26; 3.87), HR quality reliability (.25; 3.95), and HR quality empathy (.49; 2.02) indicate no collinearity between the variables.

In addition to multicollinearity, normality of the measures was also assessed. A normal p-p plot of regression standardized residuals for the dependent variable of turnover intention was regressed on the HR service quality indicators of responsiveness, reliability, and empathy. Figure 2 presents the normal P-P plot of the regression standardized residual, histogram, and scatterplot of turnover intention and job satisfaction. When following the steps proposed by Baron and Kenny (1986) to analyze a mediation analysis, job satisfaction has to function as the dependent variable in one of the steps in SPSS. The first step in the regression analysis is for HR service quality to predict turnover intention to determine path c. Step two of the Baron and Kenny (1986) mediation analysis has HR service quality predicting job satisfaction to test for path a. In the third step of the analysis, job satisfaction predicts turnover intention to determine the

significance of path b. The final step of the mediation analysis has HR service quality and job satisfaction predicting turnover intention (see Figure 1).



*Figure 1.* Mediation process.

The plot for turnover intention and job satisfaction illustrates the points are generally following the diagonal line with no extreme stray from the line. The results indicate the residuals are normally distributed. Another method to examine the assumption of normality was through the Shapiro-Wilk test in SPSS. This test revealed a p-value greater than 0.05 (.151), thus the data for the sample is normally distributed.

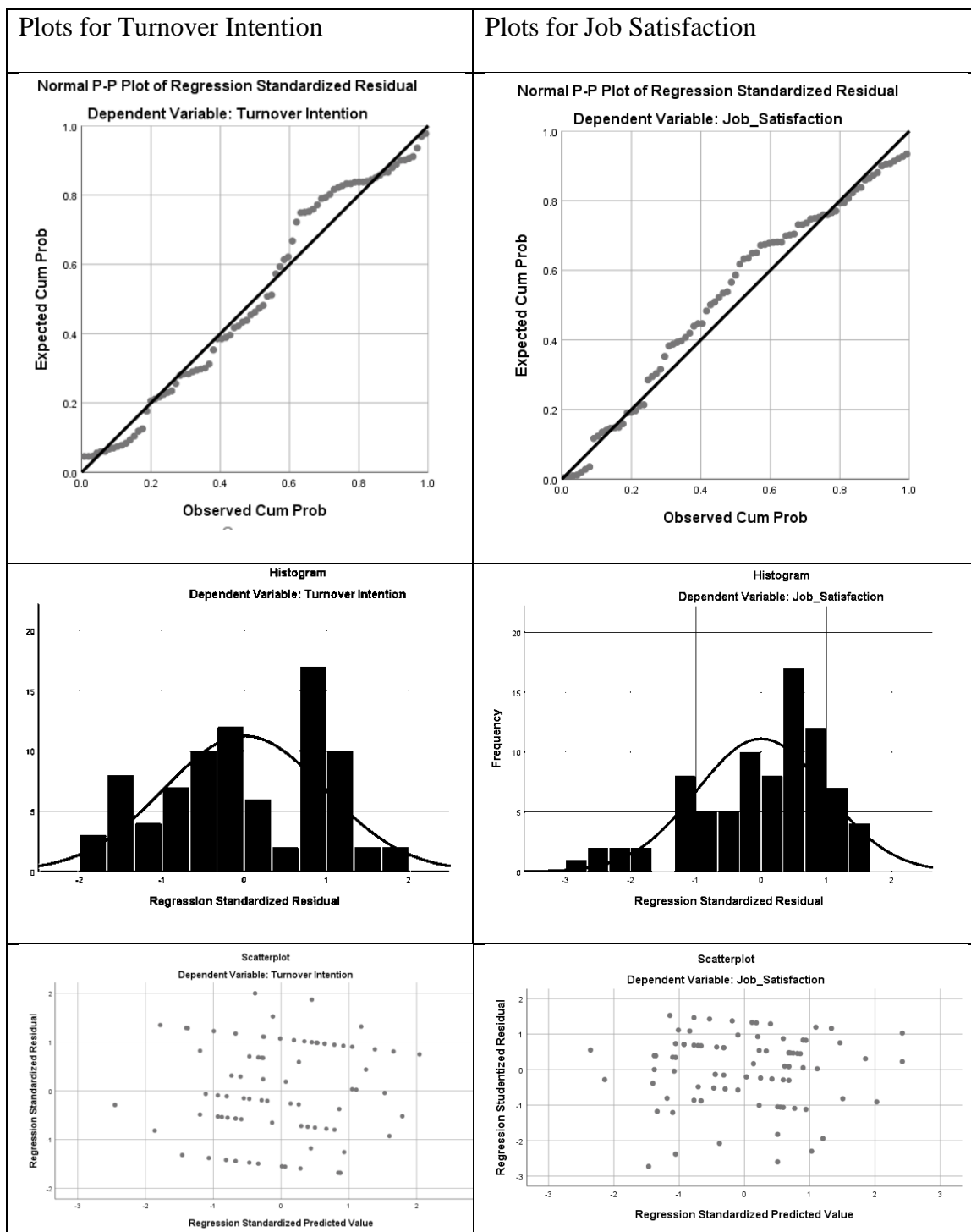


Figure 2 Summary of the Analysis of the Statistical Assumptions

The next assumption tested in the multiple regression analysis was for linearity. A linear relationship was determined between the independent variables of HR service quality indicators of responsiveness, reliability, and empathy and the dependent variable of turnover intention. In addition to the dependent variable turnover intention, job satisfaction functioned as a dependent variable to determine if it mediated the relationship between HR service quality and turnover intention, in SPSS. The results of the normal P-P plot of the regression standardized residual, histogram, and scatterplot of turnover intention and job satisfaction are shown in Figure 2. From the scatterplot, a curvilinear relationship could not be found, thus a linear relationship existed between the variables in the study.

Another key assumption in a multiple linear regression analysis is homoscedasticity. According to Osborne and Waters (2002), “homoscedasticity refers to equal variance of errors across all levels of the independent variables” (p. 4). The most common test to determine violation of homoscedasticity is the Levene test. The Levene test the null hypothesis to determine the error variance on turnover intention across the groups. If the p-value is less than .05, a violation of homoscedasticity occurs. The results from the Levene test indicated no violation of the assumption. The significance value from the test was .151. The final assumption tested in this study was for independence of residuals which was tested with the Durbin Watson test. This test measured 1.802, which indicated no autocorrelation.

The statistical method used in this study to analyze the data collected from the nursing participants were regression analyses. The initial regression analysis was

performed on how HR service quality is related to turnover intention. A mediation analysis was then performed using Baron and Kenny's (1986) method to determine if job satisfaction mediated the relationship between HR service quality and turnover intention in RQ2. Next, by following Baron and Kenny's (1986) method, another regression analysis to determine if gender moderates the relationship between nurse's perception of HR service quality indicators of responsiveness, reliability, and empathy on turnover intention was conducted.

For RQ1, the regression analysis of the overall HR service quality measure on turnover intention revealed non-significant correlation between the variables,  $R^2=.023$ ,  $F(1, 81) = 1.879$ ,  $p=.174$ ;  $B = -.224$ ,  $p=.174$ . The R in the model summary of the analysis identifies the strength of the relationship between turnover intention and the overall HR service quality measure. The  $R^2$  indicates that only 2.3% of the variance in turnover intention can be explained by the overall HR service quality measure. Upon reviewing the ANOVA analysis, the p-value was 0.174 indicative of a statistically non-significant result.

In addition to the overall HR service quality indicator being regressed on turnover intention, a multiple regression analysis was completed independently with responsiveness, reliability, and empathy on turnover intention to determine whether the HR service quality indicators could significantly predict turnover intention in RQ1. A statistically non-significant relationship occurred upon reviewing the regression analysis of the HR service quality indicators of responsiveness, reliability, and empathy on turnover intention,  $R^2 = 0.25$ ,  $F(3,79) = .677$ ,  $p=.568$ . The R in the model summary

identifies the strength of the relationship between turnover intention and the HR service quality measures of responsiveness, reliability, and empathy. The  $R^2$  indicates the proportion of variation in turnover intention that can be explained by the model. According to the results,  $R^2 = 0.25$ . The ANOVA from this analysis is also revealed to be statistically non-significant with a p-value of .568.

The regression analysis from the HR service quality indicators regressed on turnover intention explained 2.5% of the variance and the model was not a significant predictor of turnover intention,  $F(3,79) = .677$ ,  $p = .568$ . HR Quality Responsiveness results ( $B = .052$ ,  $p=.860$ ), HR Quality Reliability ( $B = -.183$ ,  $p=.542$ ), and HR Quality Empathy ( $B=-.095$ ,  $p=.661$ ) were not significant and did not predict the turnover intention.

In order to answer RQ2, the Baron and Kenny (1986) steps for mediation were followed. The first step required a regression analysis conducted with the independent variable of overall HR service quality (X) predicting turnover intention (Y) to test for path c of the mediation model which is the beta ( $\beta$ ) from the analysis. This analysis excluded the mediator job satisfaction with a result of  $B = -.224$ ,  $SE=.163$ , and  $\beta = -.151$ . A statistically non-significant relationship between overall HR service quality and turnover intention was found,  $R^2=.023$ ,  $F(1,81)=1.879$ ,  $p=.174$ . The second step required another regression analysis with overall HR service quality and the mediator job satisfaction to test for path a of the mediation analysis. The results of the analysis were  $B = .247$ ,  $SE = .187$ , and  $\beta = .145$  (Figure 3). This analysis also resulted in a statistically non-significant relationship,  $R^2=.021$ ,  $F(1,81)=1.740$ ,  $p=.191$ . The third regression

analysis was conducted with overall HR service quality and job satisfaction to predict turnover intention. The results of the analysis for path b in that regression analysis was  $B = -.472$ ,  $SE = .082$ , and  $\beta = -.541$ . Path c regression analysis results included  $B = -.107$ ,  $SE = .139$ , and  $\beta = -.072$ . This regression analysis was found to be statistically significant,  $R^2 = .310$ ,  $F(2,80) = 17.932$ ,  $p = .000$ .

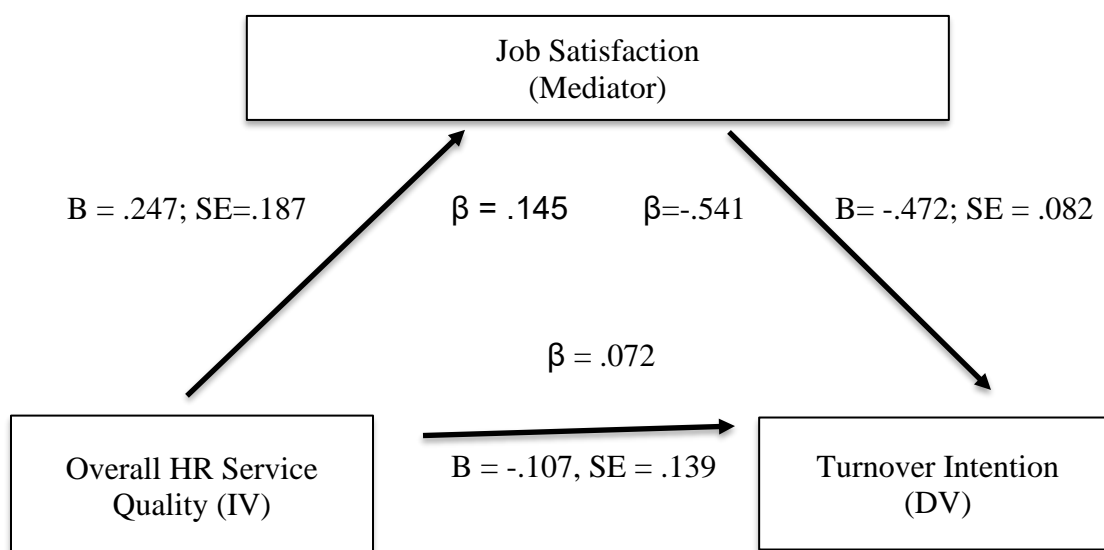


Figure 3. *Mediator Process with Job Satisfaction.*

According to the Baron and Kenny (1986) model for mediation, if a statistically non-significant relationship is found between the variables, there is no need to continue the regression analysis because there is nothing to mediate. Although the initial steps from the Baron and Kenny (1986) mediation process resulted in statistically non-significant values, a Sobel test was performed. The rationale for proceeding with the Baron and Kenny (1986) mediation steps and the Sobel test, in light of statistically non-significant results from step 1 in this study, was based upon existing research which



proved job satisfaction to mediate the relationship on turnover intention (Kuo et al., 2014; Meeusen et al., 2011; Shacklock et al., 2014). In addition to those studies, MacKinnon, Fairchild, and Fritz (2007) suggested mediation may exist although the X and Y values are found to be non-significant.

A post-hoc analysis was then performed to determine an indirect effect of the mediation using Sobel test on the overall HR service quality indicator and turnover intention. The Sobel test showed statistically non-significant results when examining the direct and indirect effects of overall HR service quality on turnover intention versus a path that included the mediator of job satisfaction ( $z=-1.287$ ,  $p=0.197$ ). The fact that the observed p-value does not fall below the established alpha level of .05, indicates the association between overall HR service quality and turnover intention is not reduced significantly by the inclusion of the mediator job satisfaction. Therefore, the results of the analysis for RQ2 reveals job satisfaction failed to mediate the relationship between overall HR service quality and turnover intention of the nursing participants in which the null hypothesis was accepted. Although job satisfaction was statistically non-significant when added to the third step of the regression analysis to determine if it mediated the relationship between overall HR service quality and turnover intention, statistical significance was found independently with job satisfaction. This would indicate job satisfaction acts as a predictor of turnover intention (Chien & Yick, 2016; Lu et al., 2002; Shader et al., 2001).

In addition to the regression analysis on the overall HR service quality indicator, a regression analysis was performed on the independent HR service quality indicators of

responsiveness, reliability, and empathy. A statistically non-significant relationship initially occurred when reviewing the data of the regression of the HR service quality indicators of responsiveness, reliability, and empathy on turnover intention,  $R^2 = -.025$ ,  $F(3,79) = .677$ ,  $p = .568$ . The second step resulted in a statistically non-significant relationship occurred with HR service quality indicators of responsiveness, reliability, and empathy with job satisfaction,  $R^2 = .026$ ,  $F(3,79) = .704$ ,  $p = .552$ . The third analysis regressed turnover intention with job satisfaction and the HR service quality indicators of responsiveness, reliability, and empathy producing a statistically significant outcome,  $R^2 = .314$ ,  $F(4,78) = 8.922$ ,  $p = .000$ . Upon reviewing the coefficient data, it is apparent that job satisfaction is the source of significance,  $B = -.472$ ,  $SE = .082$ ,  $Beta = -.541$ ,  $p = .000$ . The findings show a statistically significant correlation with the mediator variable of job satisfaction,  $R^2 = .314$ ,  $F(4,78) = 8.92$ ,  $p = .000$ . These results are similar to the overall HR service quality indicator in which job satisfaction can be linked as a predictor of turnover intention without an association to the HR service quality indicator of responsiveness, reliability, and empathy.

An additional post-hoc analysis was then performed to determine an indirect effect of the mediation using Sobel test on the HR service quality indicators of responsiveness, reliability, and empathy on turnover intention. The Sobel test showed statistically non-significant results when examining the direct and indirect effects of HR service quality indicator responsiveness ( $z = 0.2959$ ,  $p = 0.767$ ); reliability ( $z = -0.313$ ,  $p = 0.7537$ ); and empathy ( $z = 0.2602$ ,  $p = 0.794$ ) on turnover intention versus a path that included the mediator of job satisfaction. The result of the Sobel test showed that job

satisfaction failed to mediate the effects of the HR service quality indicators of responsiveness, reliability, and empathy on turnover intention.

To test the hypothesis in RQ3, a Baron and Kenny moderation analysis was conducted to determine if gender moderates the relationship between overall HR service quality indicator and turnover intention. In SPSS, the overall HR service quality was first centered and then an interaction term was created with centered HR service quality and gender. The regression analysis was run resulting in the model summary, ANOVA, and coefficient output. From the model summary, the  $R^2$  in model 1 explained for 2.3% of the variance. When the interaction term was added in model 2,  $R^2$  remained the same. The change in  $R^2$  ( $\Delta R^2$ ) which determined the effect of the addition of the interaction term in the model summary did not change ( $\Delta R^2=.000$ ). These results are shown in Table 3.

Table 3

*Model Summary of Overall HR Service Quality Moderation Analysis*

	Model 1			Model 2		
	B	SE B	$\beta$	B	SE B	B
Constant	2.77	.125		2.77	.126	
Centered Overall HRS	-.224	.163	-.151	-.211	.617	-.142
Centered Overall HRS X Gender				-.008	.354	-.009
R <sup>2</sup>	.023			.023		
F	1.879			.000		
$\Delta R^2$	.023			.000		

1. Predictors: (Constant), centered overall HRS
2. Predictors: (Constant), centered overall HRS, centered overall HRS X Gender

Upon reviewing the ANOVA of the overall HR service quality moderation analysis, the model as a whole was also statistically non-significant,  $F(2,80) = .928$ ,  $p=.399$ .

From the coefficient output, the test of significance of the interaction of overall HR service quality produced non-significant results,  $p=.983$ . These results validate the failure to reject the null hypothesis that gender moderates the relationship between the overall HR service quality indicator and turnover intention in RQ3.

### **Follow up Analysis**

In addition to the overall HR service quality measure, this study also completed a regression analysis on the independent variables responsiveness, reliability, empathy.

These variables followed the same procedures as the overall HR service quality measure

by first being centered, then an interaction term was created. When the regression analysis was run, the model summary, ANOVA, and coefficient output was reviewed. From the model summary,  $R^2$  in model 1 explained for 2.5% of the variance. When the interaction term was added in model 2,  $R^2 = .061$  or 6.1%. The change in  $R^2$  ( $\Delta R^2$ ) which determined the effect of the addition of the interaction term in the model summary increased ( $\Delta R^2 = .037$ ), however the results were statistically non-significant. The results are shown in Table 4.

Upon reviewing the ANOVA, the model as a whole is also statistically non-significant,  $F(6,76) = .830$ ,  $p = .551$ . From the coefficient output, the test of significance of the interaction of the HR service quality indicators of responsiveness, reliability, and empathy interacting with gender were statistically non-significant,  $p = .125$ ,  $p = .093$ , and  $p = .544$ .

Based upon the regression analysis, a statistically non-significant correlation was found which determines gender does not moderate the relationship between the independent variables of HR service quality indicators of responsiveness, reliability, and empathy and the independent variable turnover intention. Therefore, this analysis failed to reject the null hypothesis that gender would moderate the relationships between the nurse's perception of HRM service quality indicators of responsiveness, reliability, and empathy on turnover intention.

Table 4

*Model Summary of Responsiveness, Reliability, and Empathy Moderation Analysis*

	Model 1			Model 2		
	B	SE B	$\beta$	B	SE B	B
Constant	2.77	.126		2.80	.131	
Centered Responsiveness	.013	.284	.009	-2.01	1.32	-1.50
Centered Reliability	-.238	.291	-.176	1.918	1.294	1.414
Centered Empathy	.054	.137	.047	-.313	.584	-.272
Centered Responsiveness X Gender				1.117	.721	1.472
Centered Reliability X Gender				-1.210	.712	-1.530
Centered Empathy X Gender				.198	.325	.310
R <sup>2</sup>	.025			.061		
F	.665			.995		
$\Delta R^2$	.025			.037		

1. Predictors: (Constant), centered responsiveness, centered reliability, and centered empathy.
2. Predictors: (Constant), centered responsiveness, centered reliability, centered empathy, centered responsiveness X gender, centered reliability X gender, centered empathy X Gender.

**Summary**

In this study, a regression analysis was performed to determine whether HR service quality indicators of responsiveness, reliability, and empathy correlated with turnover intention in order to answer the first research question of the study. This regression analysis resulted in a statistically non-significant analysis. Following that

analysis, Baron and Kenny's method on mediation was utilized to determine if job satisfaction mediated the relationship between HR service quality indicators of responsiveness, reliability, and empathy on turnover intention. Although significance was found in the analysis for job satisfaction, the Sobel test revealed a statistically non-significant outcome. The final analysis of this study was to determine if gender moderates the relationship between HR service quality indicators and turnover intention. The research from that moderation analysis also revealed statistically non-significant data. Overall, the null hypotheses for each of the research questions in this study was accepted. Moving forward into Chapter 5, a discussion will be made regarding the interpretation of the data in Chapter 4, limitations of the study, recommendations for future research, and any possible implications for positive social change.

## Chapter 5: Discussion, Conclusions, and Recommendations

### **Introduction**

The nursing shortage is problematic in the United States as well as globally (Lavoie-Tremblay et al., 2010; Nooney et al., 2010). In order to determine ways to alleviate the nursing shortage, this study proposed to identify HR's role in registered nurses turnover intention. Specifically, the purpose of this study was to determine how perceived HRM system effectiveness and job satisfaction relate to the turnover intentions of nursing personnel through service quality indicators of responsiveness, reliability, and empathy, and ultimately determine if gender has an effect on those results. Through understanding the role HR plays in nursing job satisfaction and turnover intention, organizations who hire nursing personnel can identify methods of alleviating the nursing shortage.

To evaluate the research questions, a series of regression analyses were conducted. RQ1 examined nurses' perception of HRM service quality and turnover intention; RQ2 examined nurses' perception of HRM service quality and turnover intention through the job satisfaction mediator; and RQ3 examined nurses' perception of HRM service quality and turnover intention with gender being a moderator. Those questions and their supporting hypotheses guided this study. In order to collect the data, the Delmotte et al. (2012) measure of responsiveness, reliability, and empathy was used to measure HR service quality. Other demographic information such as gender was also collected in this study. Upon agreeing to consent, nursing participants were able to complete surveys online through SurveyMonkey.



Upon performing the regression analysis, null hypotheses for each of the research questions were accepted. Statistical non significance was found in terms of registered nurses' perceptions of HRM service quality and turnover intention. Furthermore, job satisfaction failed to mediate the relationship between registered nurses' perception of HRM service quality and turnover intention. In addition to those findings, gender failed to moderate the relationship between registered nurses' perception of HRM service quality and turnover intention.

### **Interpretation of the Findings**

Existing research on HR service quality and nursing turnover intention with mediator and moderator influences of job satisfaction and gender will be discussed. Data analysis for this study was accomplished using a regression analysis in SPSS. The analysis was completed based upon the three research questions.

In this study, statistically nonsignificant relationships were found between HR service quality and turnover intention, as well as the mediator and moderator variables of job satisfaction and gender. The results of this study are similar to De Geiter et al. (2012) and Rambur et al. (2003) who also obtained nonsignificant results in their study. Those studies found gender to be non-significant factors in nursing turnover intentions. However, according to Borkowski, Amann, Song, and Weiss (2007) gender was an indicator for intention of nurses to leave the profession in Florida. The study was twofold to determine if the nursing participants were considering leaving the nursing profession and why. Statistical significance was found in White-non-Hispanic men who were motivated to leave the nursing profession more than minority groups. Furthermore,

benefits was statistically significant in males, and White-non-Hispanic nurses, in comparison to females and minority groups. Unfortunately this study failed to identify where the nurses worked (e.g. hospital, faculty, and other healthcare organizations).

### **Interpretation Based Upon Nursing Population, Job Satisfaction, and Turnover Intention**

Although this study is unique in that it investigates HR service quality and nursing turnover intention with job satisfaction being a mediator and gender a moderator, this study accepted the null hypotheses for each of the research questions. In this study, the mediator job satisfaction was found to be statistically significant within the regression analysis with turnover intention; however, the Sobel test proved statistically insignificant findings. Therefore, job satisfaction did not mediate the relationship between HR service quality and turnover intention. Similar to this research study, Delobelle et al. (2010), Larrabee et al. (2003), and Ramoo, Abdullah and Piaw (2013) all found job satisfaction to be independently related to turnover intention in the nursing population.

This study uses HR service quality as an independent variable and could not statistically find a correlation where job satisfaction mediated the relationship between HR and turnover intention. This study is different from Kuo et al. (2014) who found “job satisfaction significantly but negatively predicted turnover intentions ( $\beta = -0.36$ )” (p. 229). The Sobel test for this relationship showed that job satisfaction mediated the effects of work stress on turnover intention (standardized  $\beta = 0.36$ , Sobel test  $z = 4.29$ ,  $P < 0.001$ )” p. 229. Similarly, Meeusen et al. (2011) investigated turnover intention, burnout, job satisfaction, work context characteristics, work climate, and personality of

nurse anesthetists working in Dutch hospitals or private clinics. Meeusen et al. found job satisfaction mediates the relationship between work climate and turnover intention. Shacklock et al. (2014) investigated leader-member exchange, perceived organizational support, employee engagement, affective commitment, job satisfaction, and intention to quit of nurses working in hospitals in Australia. The nursing participants included supervisors, registered nurses, enrolled nurses, and nursing assistants. Shacklock et al. found nurses with higher levels of job satisfaction had lower levels of intention to quit. In addition, job satisfaction mediated the relationship between organization commitment and turnover intention. Although statistical significance was found in this study it failed to distinguish significance individually with each group of nurses.

### **Limitations of the Study**

Although this study obtained the recommended number of registered nurses to participate one limitation of this study that could have possibly impacted the results is the number of nurses participating in the study. A larger sample of nursing participants could have impacted the results differently. Specifically, statistical significance could have been found if more men participated in the study.

### **Recommendations**

While the results of the study were nonsignificant, this study does contribute to the nursing literature by determining the significance of HR and its role in nursing job satisfaction and turnover intentions in the hospital. Although research on nursing job satisfaction and turnover intention exists, research is nonexistent when examining HR's role in nursing job satisfaction and turnover intention. This is the first study to explore

the Delmotte et al. (2012) measures of responsiveness, reliability, and empathy instrument using nursing participants.

Another recommendation for future research would be for a comparison of people who work in HR and to nursing personnel working in the hospital. HR employees include managers, directors, and HR generalists. HR employees would evaluate their own responsiveness, reliability, and empathy towards other hospital employees such as technicians, therapists, doctors, or environmental service personnel to see if there is a correlation between the HR employees and those employees.

Although the overall results of the study were statistically nonsignificant, this study does add to efforts to increase knowledge of nursing research specifically with male nurses and how their employment status impacts nursing. One recommendation determined from this study is that it should be replicated with a larger sample size that includes at least 50% male participants. Men only account for 9% of the total nursing workforce (U.S. DHHS, HRSA, 2013), and if a future study increased the amount of men participating in the study, some statistically significant findings could occur based on the male perspective on how HR service quality influences job satisfaction and turnover intentions.

Another recommendation for future research of nurses' perception of HR service quality and turnover intention should incorporate a professional commitment factor into the study. Professional commitment in nursing has been defined as belief in goals, and values of the profession, and a willingness and desire to remain in the profession. Professional commitment applied within this setting may play a significant role in the

perception nurses have of HR service quality which may impact job satisfaction and nurses' turnover intention. Furthermore, researchers should consider gathering data from one specific hospital, and identifying a larger group of nursing participants. Specifically, having more male participants could eventually result in statistically significant findings for the study.

### **Implications**

The purpose of this study was to determine if registered nurses' perception of HR service quality indicators impacted turnover intention through mediator and moderation variables of job satisfaction and gender. In order to determine the implications from this study, a comparison of the existing research on nursing job satisfaction and turnover intention, HR service quality and turnover intention, and genders influence on turnover intention will be discussed.

With RQ1, the null hypothesis was supported in that there were no statistically significant findings with how the nurses' perception of HR service quality indicators influenced turnover intention. With RQ2, job satisfaction was regressed in order to determine its mediation effect of nurses' perception of HR service quality and turnover intention. The analysis from RQ3 was meant to determine whether gender moderated the relationship between registered nurses' perceptions of HR service quality indicators and turnover intention with a supporting null hypothesis in which gender would not significantly moderate the relationship between nurses' perception of HR service quality indicators and turnover intention. The null hypothesis was accepted in this study. Although gender plays a major role in job satisfaction and turnover intention, this study

that incorporated a HR variable did not find any statistical significance results which showed gender influenced registered nurses' perception of the HR variable and turnover intention.

### **Positive Social Change**

Although this study could not find any statistical significance in terms of HR's role in nursing turnover intention through mediation and moderation variables of job satisfaction and turnover intention, registered nurses' perception of HR did not have any effect on job satisfaction and turnover intention. As a result of these findings, management and leadership within the organization can research other avenues that could possibly lead to turnover intention of nursing personnel.

### **Organizational and Societal Implications**

Hospitals and other healthcare facilities and organizations are all impacted by the nursing shortage. They seek temporary solutions such as agency staff usage, sign-on bonuses, and loan repayment incentives to alleviate the shortage. However, these solutions are temporary and very costly. Without actively identifying what the issues could be with their specific organization, the problem with the nursing shortage will continue. This study investigated HR's role in nursing personnel job satisfaction and turnover intention. Previous research and opinions on HR have been negative. For instance, negative reports on competency and credibility of HR staff have given HR a bad reputation (Hammond, 2005; Legge, 1995; Mangi, Jhatial, Shah, & Ghumro, 2012). Based upon the findings of this study, the statistically non-significant results denote HR's culpability in nursing job satisfaction and turnover intention.

## Conclusion

Within a hospital setting, nursing is considered the pillar of the organization in which nurses can monitor and administer patient's medication, complete assessments, medical evaluations, admission and discharges, and consult with other healthcare professions. All of this takes place after post-secondary educational training and passage of the NCLEX. Nurses even take on the role in leadership with different supervisory responsibilities. In a field that has been traditionally dominated by women, the field of nursing is facing a major nursing shortage, especially with male nurses (Andrews et al., 2012; Rajacich et al., 2013). Job satisfaction is one of the key leading causes of turnover intention (Liu et al., 2012; Yildiz et al., 2009). With the nursing shortage being a global crisis, hospitals and other healthcare organizations strive to determine why the shortage exist and ways to alleviate the nursing shortage.

This study is the first of its kind to use Delmotte et al. (2012) measures of responsiveness, reliability, and empathy instrument to determine the impact of nurses' perception of HR service quality indicators of responsiveness, reliability, and empathy with job satisfaction being the mediator variable and gender the moderator variable on turnover intention. Although the research revealed statistically non-significant findings, this work launched a potential association between the nursing personnel and HR staff that is noteworthy and should be further explored.

## References

- Adams, A., & Bond, S. (2000). Hospital nurses' job satisfaction, individual and organizational characteristics. *Journal of Advanced Nursing*, 32(3), 536-543. doi:10.1046/j.1365-2648.2000.01513.x
- Aguinis, H., Beaty, J. C., Boik, R. J., & Pierce, C. A. (2005). Effect size and power in assessing moderating effects of categorical variables using multiple regression: A 30-year review. *Journal of Applied Psychology*, 90, 1, 94-107. doi:10.1037/0021-9010.90.1.94.
- Andrews, M.E., Stewart, N.J., Morgan, D.G., & D'Arcy, C. (2012). More alike than different: A comparison of male and female RNs in rural and remote Canada. *Journal of Nursing Management*, 20, 561-570. doi:10.1111/j.1365-2834.2011.01195.x
- Ang, S. H., Bartram, T., McNeil, N., Leggat, S. G., & Stanton, P. (2013). The effects of high-performance work systems on hospital employees' work attitudes and intention to leave: a multi-level and occupational group analysis. *The International Journal of Human Resource Management*, 24(16), 3086-3114. doi:10.1080/09585192.2013.775029
- Applebaum, D., Fowler, S., Fiedler, N., Osinubi, O., & Robson, M. (2010). The impact of environmental factors on nursing stress, job satisfaction, and turnover intention. *The Journal of Nursing Administration*, 40, 323. doi:10.1097/NNA.0b013e3181e9393b



- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173.
- Baruch, Y., & Holtom, B. C. (2008). Survey response rate level and trends in organizational research. *Human Relations*, *61*(8), 1139-1160.  
doi:10.1177/0018726708094863
- Bartfay, W. J., Bartfay, E., Clow, K. A., & Wu, T. (2010). Attitudes and perceptions towards men in nursing education. *The Internet Journal of Allied Health Sciences and Practice*, *8*(2), 1-7. Retrieved from  
<http://nsuworks.nova.edu/cgi/viewcontent.cgi?article=1290&context=ijahsp>
- Bartram, T., Casimir, G., Djurkovic, N., Leggat, S. G., & Stanton, P. (2012). Do perceived high performance work systems influence the relationship between emotional labour, burnout and intention to leave? A study of Australian nurses. *Journal of Advanced Nursing*, *68*(7), 1567-1578. doi:10.1111/j.1365-2648.2012.05968.x
- Bell, B. S., Lee, S. W., & Yeung, S. K. (2006). The impact of e-HR on professional competence in HRM: Implications for the development of HR professionals. *Human Resource Management*, *45*, 295–308. Retrieved from  
[http://digitalcommons.ilr.cornell.edu/articles/435/?utm\\_source=digitalcommons.ilr.cornell.edu%2Farticles%2F435&utm\\_medium=PDF&utm\\_campaign=PDFCoverPages](http://digitalcommons.ilr.cornell.edu/articles/435/?utm_source=digitalcommons.ilr.cornell.edu%2Farticles%2F435&utm_medium=PDF&utm_campaign=PDFCoverPages)

- Borkowski, N., Amann, R., Song, S. H., & Weiss, C. (2007). Nurses' intent to leave the profession: issues related to gender, ethnicity, and educational level. *Health care management review, 32*(2), 160-167. doi: 10.1097/01.HMR.0000267793.47803.41
- Bowen, D. E., & Ostroff, C. (2004). Understanding HRM–firm performance linkages: The role of the “strength” of the HRM system. *Academy of management review, 29*(2), 203-221. doi: 10.5465/AMR.2004.12736076
- Boxall, P., Ang, S.H., & Bartram, T. (2011). Analyzing the black box of HRM: Uncovering HR goals, mediators, and outcomes in standardized service environment. *Journal of Management Studies, 48*(7), 1504-1532. Doi:10.1111/j.1467-6486.2010.00973.x
- Brown, B. (2009). Men in Nursing: Re-evaluating masculinities, re-evaluating gender. *Contemporary Nurse, 33*(2), 120-129. Doi:10.5172/con.2009.33.2.120
- Brunetto, Y., Shacklock, K., Bartram, T., Leggat, S. G., Farr-Wharton, R., Stanton, P., & Casimir, G. (2012). Comparing the impact of leader–member exchange, psychological empowerment and affective commitment upon Australian public and private sector nurses: implications for retention. *The International Journal of Human Resource Management, 23*(11), 2238-2255. doi:10.1080/09585192.2011.616524
- Buchan, J. (2000). Health sector reform and human resources. *Health Policy and Planning, 15*(3), 319-325. Retrieved from [https://www.researchgate.net/profile/James\\_Buchan/publication/12312114\\_Health](https://www.researchgate.net/profile/James_Buchan/publication/12312114_Health)

[\\_Sector\\_Reform\\_and\\_Human\\_Resources\\_Lessons\\_from\\_the\\_United\\_Kingdom/links/0046352bcd21131d3c000000/Health-Sector-Reform-and-Human-Resources-Lessons-from-the-United-Kingdom.pdf](#)

Campbell, D.T., & Stanley, J.C. (1963). *Experimental and quasi-experimental designs for research*. Boston: Houghton Mifflin.

Carmeli, A., & Weisberg, J. (2006). Exploring turnover intentions among three professional groups of employees. *Human Resource Development International*, 9(2), 191-206. doi: 10.1080/13678860600616305

Castle, N. G., Engberg, J., & Anderson, R. A. (2007). Job satisfaction of nursing home administrators and turnover. *Medical Care Research and Review*, 64(2), 191-211. doi: 10.1177/1077558706298291

Chen, S.-H., Yu, H.-Y., Hsu, H.-Y., Lin, F.-C., & Lou, J.-H. (2013). Organizational support, organisational identification and organizational citizenship behavior among male nurses. *Journal of Nursing Management*, 21, 1072-1082. doi:10.1111/j.1365-2834.2012.01449.x

Chen, Y.-C., & Lin, S. (2013). Modeling internal marketing and employee loyalty: A quantitative approach. *Asian Social Science*, 9(5), 99-109. doi:10.5539/ass.v9n5p99

Chiang, C., & Wu, K. (2014). The influences of internal service quality and job standardization on job satisfaction with supports as mediators: Flight attendants at workplace. *International Journal of Human Resource Management*, 25(19), 2644-2666. doi: 10.1080/09585192.2014.884616

- Chien, W. T., & Yick, S. Y. (2016). An investigation of nurses' job satisfaction in a private hospital and its correlates. *The Open Nursing Journal, 10*, 99. doi: 10.2174/1874434601610010099
- Coelho, J.P., Cunha, R.C., Gomes, J. F. S., & Correia, A.G. (2015). Strength of the HRM system: The development of a measure. *Journal of Industrial Engineering and Management, 8*(4), 1069-1086. doi: <http://dx.doi.org/10.3926/jiem.1432>
- Cohen, S., & Thomas, W. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*(2), 310-357. doi:10.1037/0033-2909.98.2.310
- Coomber, B., & Barriball, K.L. (2007). Impact of job satisfaction components on intent to leave and turnover for hospital-based nurses: A review of the research literature. *International Journal of Nursing Studies, 297-314*, 44(2). Doi:10.1016/j.ijnurstu.2006.02.004
- Curtis, L., Robinson, S., & Netten, A. (2009). Changing patterns of male and female nurses' participation in the workforce. *Journal of Nursing Management, 17*(7), 843-852. doi: 10.1111/j.1365-2834.2009.00982.x
- De Geiter, S. De Cooman, R., Pepermans, R., & Jegers, M. (2010). The psychological reward satisfaction scale: Developing and psychometric testing two refined subscales for nurses. *Journal of Advanced Nursing, 66*(4), 911-922. doi: 10.1111/j.1365-2648.2009.05199.x
- De Gieter, S., Hofmans, J., & Pepermans, R. (2011). Revisiting the impact of job satisfaction and organizational commitment on nurse turnover intention: An

individual differences analysis. *International journal of nursing studies*, 48(12), 1562-1569. doi:10.1016/j.ijnurstu.2011.06.007

Delmotte, J., De Winne, S., & Sels, L. (2012). Toward an assessment of perceived HRM system strength: scale development and validation. *The International Journal of Human Resource Management*, 23(7), 1481-1506.  
doi:org/10.1080/09585192.2011.579921

Delobelle, P., Rawlinson, J. L., Ntuli, S., Malatsi, I., Decock, R., & Depoorter, A. M. (2011). Job satisfaction and turnover intent of primary healthcare nurses in rural South Africa: a questionnaire survey. *Journal of advanced nursing*, 67(2), 371-383. doi: 10.1111/j.1365-2648.2010.05496.x

De Winne, S., Delmotte, J., Gilbert, C., & Sels, L. (2013). Comparing and explaining HR department effectiveness assessments: Evidence from line managers and trade union representatives. *The International Journal of Human Resource Management*, 24(8), 1708-1735. doi:10.1080/09585192.2012.725069

Drost, E.A. (2011). Validity and reliability in social science research. *International Perspectives on Higher Education Research*, 38(1), 105-124. Retrieved from <https://pdfs.semanticscholar.org/0815/34bfe6cf8dd0da1f40704098366f368da3e8.pdf>

El-Jardali, F., Dimassi, H., Dumit, N., Jamal, D., & Mouro, G. (2009). A national cross-sectional study on nurses' intent to leave and job satisfaction in Lebanon: Implications for policy and practice. *BMC Nursing*, 8(1), 1-13. Doi: 10.1186/1472-6955-8-3

- Elkins, G., Cook, T., Dove, J., Markova, D., Marcus, J. D., Meyer, T., ... & Perfect, M. (2010). Perceived stress among nursing and administration staff related to accreditation. *Clinical Nursing Research*, 19(4), 376–386.  
doi:10.1177/1054773810373078
- Estryn-Behar, M., Van der Heijden, B., Oginska, H., Camerino, D., Le Nezet, O., Conway, P.M., Fry, C., & Hasselhorn, H. (2007). The impact of social work environment, teamwork characteristics, burnout, and personal factors upon intent to leave among European nurses. *Medical Care*, 45(10), 939-950.  
doi:10.1097/MLR.ob013e31806728d8
- Evangelista, A. & Sims-Giddens, S. (2008). Gender differences in discipline of nurses in Missouri. *Western Journal of Nursing Research*, 30(4), 501-514.  
doi:10.1177/0193945907303302
- Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological science*, 18(3), 233-239. doi:10.1111/j.1467-9280.2007.01882.x.
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, 51(1), 115-134. doi: 10.1037/0022-0167.51.1.115
- Frenkel, S., Sanders, K., & Bednall, T. (2013). Employee perceptions of management relations as influences on job satisfaction and quit intentions. *Asia Pacific Journal of Management*, 30(1), 7-29. doi:10.1007/s104900-012-9290-z

- Galletta, M., Portoghese, I., Penna, M. P., Battistelli, A., & Saiani, L. (2011). Turnover intention among Italian nurses: The moderating roles of supervisor support and organizational support. *Nursing & health sciences, 13*(2), 184-191. doi: 10.1111/j.1442-2018.2011.00596.x
- Giallonardo, L. M., Wong, C. A., & Iwasiw, C. L. (2010). Authentic leadership of preceptors: predictor of new graduate nurses' work engagement and job satisfaction. *Journal of nursing management, 18*(8), 993-1003. doi:10.1111/j.1365-2834.2010.01126.x
- Gibb, S. (2000). Evaluating HRM effectiveness: The stereotype connection. *Employee Relations, 22*(1), 58-75.
- Gibb, S. (2001). The state of human resource management: evidence from employees' views of HRM systems and staff. *Employee Relations, 23*(4), 318-336. doi.org/10.1108/EUM0000000005685
- Gilbert, C., De Winne, S., & Sels, L. (2011). The influence of line managers and HR department on employees' affective commitment. *The International Journal of Human Resource Management, 22*(8), 1618-1637. doi: 10.1080/09585192.2011.565646
- Goodin, H.J. (2003). The nursing shortage in the United States of America: An integrative review of literature. *Journal of Advanced Nursing, 43*(4), 335-350. doi.org/10.1046/j.1365-2648.2003.02722\_1.x
- Guleryuz, G., Gney, S., Aydin, E.M., & Asan, O. (2008). The mediating effect of job satisfaction between emotional intelligence and organisational commitment of

- nurses: A questionnaire survey. *International Journal of Nursing Studies*, 45(11), 1625-1635. doi: 10.1016/j.ijnurstu.2008.02.004
- 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: [http://dx.doi.org/10.1016/0030-5073\(76\)90016-7](http://dx.doi.org/10.1016/0030-5073(76)90016-7)
- Hammond, K. (2005). Why we hate HR. *Fast Company*, 40-47. Retrieved from <https://www.ou.edu/russell/4153/Hammond.pdf>
- Han, J., Chou, P., Chao, M., & Wright, P. M. (2006). The HR competencies-HR effectiveness link: a study in Taiwanese high-tech companies. *Human Resource Management*, 45(3), 391-406. doi:10.1002/hrm.20114
- Han, G. H., & Jekel, M. (2011). The mediating role of job satisfaction between leader-member exchange and turnover intentions. *Journal of nursing management*, 19(1), 41-49. doi: 10.1111/j.1365-2834.2010.01184
- Hayes, B., Bonner, A. N. N., & Pryor, J. (2010). Factors contributing to nurse job satisfaction in the acute hospital setting: a review of recent literature. *Journal of Nursing Management*, 18(7), 804-814. doi:10.1111/j.1365-2834.2010.01131.x
- Hes, E. (2013). *A meta-analytic investigation of the relationship between employee perceptions of HRM and employee attitudes and behaviors*. Paper presented at the 2<sup>nd</sup> IBA Bachelor Thesis Conference, Enschede, The Netherlands. Abstract retrieved from [http://essay.utwente.nl/66226/1/Hes\\_BA\\_MB.pdf](http://essay.utwente.nl/66226/1/Hes_BA_MB.pdf)
- Hirschhorn, C. A., West, T. B., Hill, K. S., Cleary, B. L., & Hewlett, P. O. (2010). Experienced nurse retention strategies: What can be learned from top-performing



organizations? *Journal of Nursing Administration*, 40(11), 463-467.

doi:10.1097/NNA.0b013e3181f88fd3

Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55(6), 1264-1294.

doi:10.5465/amj.2011.0088

Jinks, A. M., & Bradley, E. (2004). Angel, handmaiden, battleaxe or whore? A study which examines changes in newly recruited student nurses' attitudes to gender and nursing stereotypes. *Nurse education today*, 24(2), 121-127.

doi:10.1016/j.nedt.2003.10.011

Kim, J., & Han, W. (2012). Improving service quality in long-term care hospitals: National evaluation on long-term care hospitals and employees perception of quality dimensions. *Osong Public Health Res Perspect*, 3(2), 94-99.

doi:10.1016/j.phrp.2012.04.005.

Kouta, C., & Kaite, C. P. (2011). Gender discrimination and nursing: A literature review. *Journal of Professional Nursing*, 27(1), 59-63.

doi:10.1016/j.profnurs.2010.10.006)

Kuo, H. T., Lin, K. C., & Li, I. C. (2014). The mediating effects of job satisfaction on turnover intention for long-term care nurses in Taiwan. *Journal of nursing management*, 22(2), 225-233. doi:10.1111/jonm.12044

Kutney-Lee, A., Wu, E. S., Sloane, D. M., & Aiken, L. H. (2013). Changes in hospital nurse work environments and nurse job outcomes: an analysis of panel data.

*International Journal of Nursing Studies*, 50(2), 195-201.

doi:10.1016/j.ijnurstu.2012.07.014

Larrabee, J. H., Janney, M. A., Ostrow, C. L., Withrow, M. L., Hobbs, G. R., & Burant, C. (2003). Predicting registered nurse job satisfaction and intent to leave. *Journal of Nursing Administration*, 33(5), 271-283.

Larrabee, J. H., Wu, Y., Persily, C. A., Simoni, P. S., Johnston, P. A., Marcischak, T. L., ... & Gladden, S. D. (2010). Influence of stress resiliency on RN job satisfaction and intent to stay. *Western Journal of Nursing Research*, 32(1), 81-102. doi: 10.1177/0193945909343293

Lavoie-Tremblay, M., Leclerc, E., Marchionni, C., & Drevniok, U. (2010). The needs and expectations of generation Y nurses in the workplace. *Journal for Nurses in Professional Development*, 26(1), 2-8. doi:10.1097/NND.0b013e3181a68951

Lavoie-Tremblay, M., O'Brien-Pallas, L., Gelinis, C., Desforges, N., & Marchionni, C. (2008). Addressing the turnover issue among new nurses from a generational viewpoint. *Journal of Nursing Management*, 16(6), 724-733. doi:10.1111/j.1365-2934.2007.00828.x

Lawson, T. E., & Limbrick, V. (1996). Critical competencies and developmental experiences for top HR executives. *Human Resource Management*, 35, 67-85. doi:10.1002/(SICI)1099-050X(199621)35:1<67::AID-HRM5>3.0.CO;2-V

Lee, S. M., Lee, D., Kang, C.-Y. (2012). The impact of high-performance work systems in the health-care industry: Employee reactions, service quality, customer

- satisfaction, and customer loyalty. *The Service Industries Journal*, 32(1), 17-36.  
doi:10.1080/02642069.2010.545397
- Leedy, P. & Ormrod, J. (2001). *Practical research: Planning and design* (7th ed.). Upper Saddle River, NJ: Merrill Prentice Hall. Thousand Oaks: SAGE Publications.
- Legge, K. (1995). What is human resource management? In: *Human Resource Management, Management, Work and Organizations*, (62-95). Palgrave, London.  
doi:10.1007/978-1-349-24156-9\_3
- Li, X., Frenkel, S. J., & Sanders, K. (2011). Strategic HRM as process: How HR system and organizational climate strength influence Chinese employee attitudes. *The International Journal of Human Resource Management*, 22(9), 1825-1842.  
doi:10.1080/09585192.2011.573965
- Liu, C., Zhang, L., Ye, W., Zhu, J., Cao, J., Lu, X., & Li, F. (2012). Job satisfaction and intention to leave: a questionnaire survey of hospital nurses in Shanghai of China. *Journal of Clinical Nursing*, 21(1-2), 255-263. doi:10.1111/j.1365-2702.2011.03766.x
- Lu, K.-Y., Lin, P.-L., Wu, C.-M., Hsieh, Y.-L., & Chang, Y.-Y. (2002). The relationships among turnover intentions, professional commitment, and job satisfaction of hospital nurses. *Journal of Professional Nursing*, 18(4), 214-219.  
doi:10.1053/jpnu.2002.127573
- MacKinnon, D.P., Fairchild, A.J., & Fritz, M.S. (2007). Mediation analysis. *Annual Review of Psychology*, 58, 593-614.  
doi:10.1146/annurev.psych.58.110405.085542.

- Maier, C., Laumer, S., Eckhardt, A., & Weitzel, T. (2012). Analyzing the impact of HRIS implementations on HR personnel's job satisfaction and turnover intention. *The Journal of Strategic Information Systems*, 22(3), 193-207.  
doi:10.1016/j.jsis.2012.09.001
- Mangi, R.A., Jhatial, A.A., Shah, S.A.A., & Ghumro, I.A. (2012). Human resource management practices in private sector organisations in Pakistan: Study of cultural influences. *Global Journal of Management and Business Research*, 12(7), 20-30.
- Masum, A. K. M., Azad, M. A. K., Hoque, K. E., Beh, L. S., Wanke, P., & Arslan, Ö. (2016). Job satisfaction and intention to quit: an empirical analysis of nurses in Turkey. *PeerJ*, 4, e1896. doi: 10.7717/peerj.1896.
- McKinlay, A., Cowan, S., McVittie, C., & Ion, R. (2010). Start student nurses' gender-based accounts of men in nursing. *Procedia Social and Behavioral Sciences*, 5, 345-349. doi: 10.1016/j.sbspro.2010.07.102
- McMillian, J., Morgan, S.A., & Ament, P. (2006). Acceptance of male registered nurses by female registered nurses. *Journal of Nursing Scholarship*, 38(1), 100-106.  
doi:10.1111/j.1547-5069.2006.00066.x
- Meadus, R.J. (2007). Men in Nursing: Barrier to recruitment. *Nursing Forum*, 35(3), 5-12. doi: 10.1111/j.1744-6198.2000.tb00998.x
- Meeusen, V. C., Van Dam, K., Brown-Mahoney, C., Van Zundert, A. A., & Knape, H. T. (2011). Understanding nurse anesthetists' intention to leave their job: how burnout and job satisfaction mediate the impact of personality and workplace

characteristics. *Health care management review*, 36(2), 155-163. doi:

10.1097/HMR.0b013e3181fb0f41

Meijerink, J.G., Bondarouk, T., & Lepak, D.P. (2015). Employees as Active Consumers of HRM: Linking Employees' HRM Competences with Their Perceptions of HRM Service Value. *Human Resource Management*, 55(2), 219-240.

doi:10.1002/hrm.21719

Melnyk, B. M. (2006). The latest evidence on factors impacting nurse retention and job satisfaction. *Worldviews on Evidence-Based Nursing*, 3(4), 201-204. doi:

10.1111/j.1741-6787.2006.00071.x

Mobley, W.H., Horner, S.O., & Hollingsworth, A.T. (1978). An evaluation of precursors of hospital employee turnover. *Journal of Applied Psychology*, 63(4), 408-414.

doi:10.1037/0021-9010.63.4.408

Moore, G.A., & Dienemann, J.A. (2014). Job satisfaction and career development of men in nursing. *Journal of Nursing Education and Practice*, 4(3), 86-93.

doi:10.5430/jnep.v4n3p86

Noe, R.A., Hollenbeck, J.R., Gerhart, B., & Wright, P.M. (2008). Human resource management: Gaining a competitive advantage. In R.A. Noe, J.R. Hollenbeck, B. Gerhart, & P.M. Wright (Eds.), *Human resource management: Gaining a competitive advantage* (Vol. 6, pp. 1-62). New York, NY: McGraw-Hill/Irwin.

Nooney, J.G., Unruh, L., & Yore, M.M. (2010). Should I stay or should I go? Career change and labor force separation among registered nurses in the U.S. *Social Science & Medicine*, 70(12), 1874-1881. doi:10.1016/j.socscimed.2010.02.037

- O'Donnell, D.M., Livingston, P.M., & Bartram, T. (2012). Human resource management activities on the frontline: A nursing perspective. *Contemporary Nurse: A Journal for the Australian Nursing Profession*, 41(2), 198-205. doi: 10.5172/conu.2012.41.2.198
- Osborne, J. W., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research & Evaluation*, 8(2). Retrieved from <http://pareonline.net/getvn.asp?v=8&n=2>
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). Servqual. *Journal of retailing*, 64(1), 12-40.
- Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Refinement and reassessment of the SERVQUAL scale. *Journal of retailing*, 67(4), 420.
- Paşaoğlu, D., & Tonus, H. Z. (2014). Strategic importance of human resource practices on job satisfaction in private hospitals. *Procedia-Social and Behavioral Sciences*, 150, 394-403. doi:10.1016/j.sbspro.2014.09.035.
- Rajacich, D., Kane, D., Williston, C., & Cameron, S. (2013). If they do call you a nurse, it is always a “male nurse”: Experiences of men in the nursing profession. *Nursing Forum*, 48(1), 71-80. doi:10.1111/nuf.12008
- Rajapaksa, S. & Rothstein, W. (2009). Factors that influence the decisions of men and women nurses to leave nursing. *Nursing Forum*, 44(3), 195-206. doi:10.1111/j.1744-6198.2009.00143.x

- Rambur, B., Palumbo, M. V., McIntosh, B., & Mongeon, J. (2003). A statewide analysis of RNs' intention to leave their position. *Nursing Outlook*, *51*(4), 182-188. doi:10.1016/S0029-6554(03)00115-5
- Ramoo, V., Abdullah, K. L., & Piaw, C. Y. (2013). The relationship between job satisfaction and intention to leave current employment among registered nurses in a teaching hospital. *Journal of Clinical Nursing*, *22*(21-22), 3141-3152. doi:10.1111/jocn.12260
- Rochlen, A. B., Good, G. E., & Carver, T. A. (2009). Predictors of gender-related barriers, work, and life satisfaction among men in nursing. *Psychology of Men & Masculinity*, *10*(1), 44-56. doi: 10.1037/a001329
- Roulin, N., Mayor, E., & Bangerter, A. (2014). How to Satisfy and Retain Personnel Despite Job-Market Shortage. *Swiss Journal of Psychology*, *73*(1), 13-24. doi:10.1024/1421-0185/a000123
- Sanders, K., Dorenbosch, L., & de Reuver, R. (2008). The impact of individual and shared employee perceptions of HRM on affective commitment: Considering climate strength. *Personnel Review*, *37*(4), 412-425. doi:10.1108/00483480810877589
- Shacklock, K., Brunetto, Y., Teo, S., & Farr - Wharton, R. (2014). The role of support antecedents in nurses' intentions to quit: the case of Australia. *Journal of advanced nursing*, *70*(4), 811-822. doi:10.1111/jan.12239

- Shader, K., Broome, M. E., Broome, C. D., West, M. E., & Nash, M. (2001). Factors influencing satisfaction and anticipated turnover for nurses in an academic medical center. *Journal of Nursing Administration, 31*(4), 210-216.
- Shaughnessy, J.J., Zechmeister, E.B., & Zechmeister, J.S. (2012). *Research methods in Psychology* (9<sup>th</sup> ed.). New York, NY: McGraw-Hill Companies, Inc.
- Snipes, R.L., Oswald, S.L., LaTour, M., & Armenakis, A.A. (2005). The effects of specific job satisfaction facets on customer perceptions of service quality: An employee-level analysis. *Journal of Business Research, 58*, 1330-1339.  
doi:10.1016/j.jbusres.2004.03.007
- Stanton, P., Young, S., Bartram, T., & Leggat, S. G. (2010). Singing the same song: translating HRM messages across management hierarchies in Australian hospitals. *The International Journal of Human Resource Management, 21*(4), 567-581.  
doi:1080/09585191003612075
- Tabachnick, B.G., & Fidell, L.S. (2007). *Using Multivariate Statistics* (5<sup>th</sup> Edition). Boston: Pearson/Allyn & Bacon
- Thompson, C.G., Kim, R.S., Aloe, A.M., & Becker, B.J. (2017). Extracting the variance inflation factor and other multicollinearity diagnostics from typical regression results. *Basic and Applied Social Psychology, 39*(2), 81-90.  
doi:10.1080/01973533.2016.1277529.
- Tissen, R. J., Lekanne Deprez, F. R. E., Burgers, R. G. B. M., & van Montfort, K. (2010). 'Change or hold: reexamining HRM to meet new challenges and demands': the future of people at work: a reflection on diverging human resource management



- policies and practices in Dutch organizations. *The International Journal of Human Resource Management*, 21(5), 637-652. doi:10.1080/09585191003658813
- Tourangeau, A. E., Thomson, H., Cummings, G., & Cranley, L. A. (2013). Generation-specific incentives and disincentives for nurses to remain employed in acute care hospitals. *Journal of Nursing Management*, 21, 473-482. doi:10.1111/j.1365-2834.2012.01424.x
- Tracey, C., & Nicholl, H. (2007). The multifaceted influence of gender in career progress in nursing. *Journal of Nursing Management*, 15(7), 677-682. doi:10.1111/j.1365-2934.2006.00677
- Trivellas, P., & Santouridis, I. (2016). Job satisfaction as a mediator of the relationship between service quality and organizational commitment in higher education. An empirical study of faculty and administration staff. *Total Quality Management & Business Excellence*, 27(1-2), 169-183. doi:10.1080/14783363.2014.969595
- Tummers, L.G., Groeneveld, S.M., & Lankhaar, M. (2013). Why do nurses intend to leave their organization? A large-scale analysis in long-term care. *Journal of Advanced Nursing*, 69(12), 2826-2838. doi: 10.1111/jan.12249
- Turnley, W.H., & Feldman, D.C. (2000). Re-examining the effects of psychological contract violations: Unmet expectations and job dissatisfaction as mediators. *Journal of Organizational Behavior*, 21, 25-42.
- Twomey, J.C., & Meadus, R. (2016). Men nurses in Atlantic Canada: Career choice, barriers, and satisfaction. *Journal of Men's Studies*, 24(1), 78-88. doi:10.1177/1060826515624414

- Uen, J. F., Ahlstrom, D., Chen, S.-Y., & Tseng, P.-W. (2012). Increasing HR's strategic participation: The effect of HR service quality and contribution expectations. *Human Resource Management, 51*(1), 3-23. doi: 10.1002/hrm.20467
- U.S. Department of Labor, Bureau of Labor Statistics. (2015). *Occupational Outlook Handbook, 2016-2017 Edition, Registered Nurses*. Retrieved from <http://www.bls.gov/ooh/healthcare/registered-nurses.htm>
- U.S. Department of Health and Human Services, Health Resources and Services Administration. (2013). The U.S. nursing workforce: Trends in supply and education. Retrieved from <http://bhpr.hrsa.gov/healthworkforce/reports/nursingworkforce/nursingworkforcefullreport.pdf>
- U.S. Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Workforce Analysis. (2014). *The Future of the Nursing Workforce: National- and State-Level Projections, 2012-2025*. Retrieved from <https://bhw.hrsa.gov/sites/default/files/bhw/nchwa/projections/nursingprojections.pdf>
- Vacha-Haase, T., & Thompson, B. (2004). How to Estimate and Interpret Various Effect Sizes. *Journal of Counseling Psychology, 51*(4), 473-481. <http://dx.doi.org/10.1037/0022-0167.51.4.473>
- Van De Voorde, K., Paauwe, J., & Van Veldhoven, M. (2012). Employee well-being and the HRM–organizational performance relationship: a review of quantitative

studies. *International Journal of Management Reviews*, 14(4), 391-407.

doi:10.1111/j.1468-2370.2011.00322

Walker, A., & Campbell, K. (2013). Work readiness of graduate nurses and the impact on job satisfaction, work engagement and intention to remain. *Nurse Education Today*, 33(12), 1490-1495. doi: 10.1016/j.nedt.2013.05.008

Today, 33(12), 1490-1495. doi: 10.1016/j.nedt.2013.05.008

Watson, T. (2005). Organizations, strategies and human resourcing. *The Strategic Managing of Human Resource*, 7-33.

Weiss, H. M. (2002). Deconstructing job satisfaction: Separating evaluations, beliefs and affective experiences. *Human Resource Management Review*, 12(2), 173-194.

doi:10.1016/S1053-4822(02)00045-1

Welding, N. M. (2011). Creating a nursing residency: Decrease turnover and increase clinical competence. *Medsurg Nursing*, 20(1), 37-40. Retrieved from

[https://amsn.org/sites/default/files/documents/practice-resources/healthy-work-environment/resources/MSNJ\\_Welding\\_20\\_01.pdf](https://amsn.org/sites/default/files/documents/practice-resources/healthy-work-environment/resources/MSNJ_Welding_20_01.pdf)

Wieck, K. L., Dols, J., & Landrum, P. (2010). Retention priorities for the intergenerational nurse workforce. *Nursing Forum*, 45,(1), 7-17. doi:

10.1111/j.1744-6198.2009.00159.x

Wildes, V. J., & Parks, S.C. (2005). Internal service quality: Marketing strategies can help to reduce employee turnover for food servers. *International Journal of Hospitality & Tourism Administration*, 6(2), 1-27. doi:10.1300/J149v06n02\_01

& *Tourism Administration*, 6(2), 1-27. doi:10.1300/J149v06n02\_01

- Wildes, V. J. (2007). Attracting and retaining food servers: How internal service quality moderates occupational stigma. *Hospitality Management*, 26, 4-19.  
doi:10.1016/j.ijhm.2005.08.003
- Williams, C. (2007). Research methods. *Journal of Business & Economic Research*, 5(3), 65-72. doi:10.19030/jber.v5i3.2532
- Wolfenden, J. (2011). Men in nursing. *The Internet Journal of Allied health Sciences and Practice*, 9(2), 1-6. Retrieved from <http://nsuworks.nova.edu//>
- Wright, P.D., & Bretthauer, K.M. (2010). Strategies for addressing the nursing shortage: Coordinated decision making and workforce flexibility. *Decision Science*, 41(2), 373-401. doi:10.1111/j.1540-5915.2010.00269.x
- Yang, B. (2005). Factor Analysis. In Swanson, & Holton (Eds.), *Research in Organization: Foundations and Methods of Inquiry* (pp. 118-200). Location: San Francisco, California
- Yıldız, Z., Ayhan, S., & Erdoğan, Ş. (2009). The impact of nurses' motivation to work, job satisfaction, and sociodemographic characteristics on intention to quit their current job: An empirical study in Turkey. *Applied Nursing Research*, 22(2), 113-118. doi: 10.1016/j.apnr.2007.06.002
- 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://workspace.unpan.org/sites/internet/Documents/UNPAN92620.pdf>

Zinn, J. L., Guglielmi, C. L., Davis, P. P., & Moses, C. (2012). Addressing the nursing shortage: the need for nurse residency programs. *Association of Operating Room Nurses. AORN Journal*, 96(6), 652-657. doi:10.1016/j.aorn.2012.09.011

## Appendix A: Author Approval to use HR Service Quality Instrument

TO: Author of Instrument:

December 27, 2015

Dear Author of Instrument:

My name is Anita E. Jackson and I am a doctoral student at Walden University. I am completing my dissertation on HRM effectiveness and the level of motivation of nursing personnel. I would like your permission to use your instrument in my study.

Material to be used: Instrument to measure perceived HRM system strength  
Referenced:

Delmotte, J., De Winne, S., & Sels, L. (2012) Toward an assessment of perceived HRM system strength: scale development and validation. *The International Journal of Human Resource Management*, 23(7), 1481-1506.  
doi:10.1080/09585192.2011.579921

This permission will encompass the continued efforts in the completion and publication of this dissertation and future amendments or revisions to this work. Your signing of this letter is verification that you own the rights to the material to be used in this study.

If the provisions provided in this letter are accurate and acceptable please sign below and return via email. If you have any additional conditions please include them at the bottom of this form.

Thank you so much for your time and consideration in this matter.

Sincerely,

Anita E. Jackson, MS

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Signature

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Date

Comments: \_\_\_\_\_

## Appendix B: Author Approval to Use Job Satisfaction Instrument

To: Author of Instrument

April 15, 2018

Dear Author of Instrument:

My name is Anita E. Jackson and I am a doctoral student at Walden University. I am completing my dissertation on HR service quality and turnover intention of nursing personnel. I would like your permission to use your instrument in my study.

Material to be used: Instrument to measure job satisfaction

Referenced:

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.

This permission will encompass the continued efforts in the completion and publication of this dissertation and future amendments or revisions to this work.

If the provisions provided in this letter are accurate and acceptable please respond via email with your approval. If you have any additional conditions please let me know.

Thank you so much for your time and consideration in this matter.

Sincerely,

Anita E. Jackson, MS

## Appendix C: Author Approval to Use Intent to Leave Instrument

To: Author of Instrument

January 13, 2018

Dear Author of Instrument:

My name is Anita E. Jackson and I am a doctoral student at Walden University. I am completing my dissertation on HR service quality and turnover intention of nursing personnel. I would like your permission to use your instrument in my study.

Material to be used: Intention to leave instrument.

Referenced:

Ang, S. H., Bartram, T., McNeil, N., Leggat, S. G., & Stanton, P. (2013). The effects of high-performance work systems on hospital employees' work attitudes and intention to leave: a multi-level and occupational group analysis. *The International Journal of Human Resource Management*, 24(16), 3086-3114.

This permission will encompass the continued efforts in the completion and publication of this dissertation and future amendments or revisions to this work.

If the provisions provided in this letter are accurate and acceptable please respond via email. If you have any additional conditions please let me know.

Thank you so much for your time and consideration in this matter.

Sincerely,

Anita E. Jackson, MS



## Appendix D: Invitation to Participate Email

Dear Nurse,

In an effort to research how HR Service Quality effects nurses working in hospitals in Maryland, doctoral candidate Anita Jackson at Walden University is conducting a research study, The Impact of Human Resources on Nurse Turnover Intention. Your participation with completing these survey questions will help hospital leadership understand the impact HR has on retention of nursing personnel. Completing these survey questions will take approximately 10 minutes to complete.

You can access the surveys by clicking the link below.

Survey link: [LINK HERE](#)

The answers you provide will be kept anonymous and confidential to be used solely for the purposes of this research study.

If you have questions or are having difficulties accessing or submitting these surveys, please contact me by email at: [NAME@waldenu.edu](mailto:NAME@waldenu.edu).

Your participation and completion of these survey is important and appreciated.

Sincerely,

*Anita E. Jackson*

Anita E. Jackson

## Appendix E: Informed Consent Form

### The Impact of Human Resources on Nurse Turnover Intention:

#### **PURPOSE:**

You are invited to participate in this research study being conducted as a requirement of a dissertation, The Impact of Human Resources on Nurse Turnover Intention. The purpose of the study is to determine if HR service quality has an impact on nursing turnover intention. In addition, this study will also determine if job satisfaction is a mediator and gender a moderator for turnover intention.

#### **PARTICIPATION REQUIREMENTS:**

You will be asked to complete an online survey with 16 questions pertaining to HR service quality, job satisfaction, and turnover intention. You have been invited to participate in this study because of specific requirements such as you are a licensed registered nurse working in a hospital within the State of Maryland. Ultimately, your responses to this study will provide further clarification to the research community the effectiveness of HR service quality and its impact on nursing turnover intention.

#### **PROCEDURES:**

If you elect to participate in the study, information will be collected about you, your nursing education, and your experience with human resources. Specifically, the data collected will be your gender, education level, number of years as a nurse, number of years with your current hospital. In addition to that information, survey questions about HR, job satisfaction, and turnover intention will also be collected.

Some sample survey questions for this research study include the following:

- HR staff performs HR services punctually and accurately
- HR staff provides prompt HR service
- I am very satisfied with my job
- I often think of quitting the organization

It should take approximately 20 minutes or less to complete the survey questions.

#### **COMPENSATION:**

This study will not disburse any forms of monetary compensation for its participants.

#### **CONFIDENTIALITY:**

Your participation in this study is strictly confidential and voluntary. Should you elect to discontinue participating in this study you can simply close the browser in which the survey is being completed, and you will discontinue your participation.

**RISKS AND BENEFITS IN THE STUDY:**

Based upon the research design outlined in this study, this study poses no foreseeable risks to the nursing participants. This study in no ways effects your reputation, your employment status with the hospital in which you work, your social status, safety or wellbeing. The data collected from the study will benefit nurses as well as hospitals and other organizations that employ nurses. The outcome of the study's findings will assist HR in understanding its role in the nursing shortage and what values/measures either promote or diminish the relationship between nursing personnel and the organization.

**PRIVACY:**

The data collected in this study and the results will only be accessed by the researcher, chairperson, and the Walden University IRB. No other identifiable information about the nursing participants will be available to the researcher, chairperson, nor the Walden University IRB. The social media sites (LinkedIn, Twitter, and Facebook) in which the potential nursing participants will review the invitation to participate in the study, will not have any access to the research study nor the results from the study. The data will be collected and reside on SurveyMonkey for one year. The data will be deleted by the researcher after one year in SurveyMonkey. The data will then be encrypted on a personal computer of the researcher for an additional five years before ultimately destroying the data.

**CONTACT INFORMATION:**

If you have questions at any time about this study, or you experience adverse effects as the result of participating in this study, you may contact the researcher Anita E. Jackson, at [anita.jackson3@waldenu.edu](mailto:anita.jackson3@waldenu.edu). If you have questions regarding your rights as a research participant, or if problems arise which you do not feel you can discuss, please contact a Walden University representative by email at [irb@mail.waldenu.edu](mailto:irb@mail.waldenu.edu). If you desire a copy of this informed consent you may save, print, or contact the researcher, and one will be provided to you.

The approval number for this study is 08-27-18-0304113 and it expires on August 26<sup>th</sup>, 2019.

**CONSENT:**

I have read, and I understand the above informed consent pertaining to this research study of the impact of human resources on nursing turnover intention. I understand my

participation is voluntary and I may discontinue participating in the study at any time. By clicking on the yes button on this informed consent, I further acknowledge my consent and I voluntarily agree to take part in this study. If I click on the no button of this informed consent, the research study will terminate. Should you choose to stop participation, simply close your browser.

### Appendix F: Tweet for Social Media

Calling nurses licensed and working in hospitals in Maryland: Online survey “The Impact of Human Resources on Nurses Turnover Intention”

Visit link: [SMLINK\\_HERE](#)