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Job Embeddedness: the differences between registered nurses and health care assistants

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JOB EMBEDDEDNESS: THE DIFFERENCES BETWEEN REGISTERED NURSES AND HEALTH CARE ASSISTANTS

by

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Abstract

JOB EMBEDDEDNESS: THE DIFFERENCES BETWEEN REGISTERED NURSES AND HEALTH CARE ASSISTANTS

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Healthcare employees face substantial challenges in their efforts to provide exceptional patient care and meet organizational expectations. Stressful relationships between registered nurses and health care assistants affect quality of care, patient satisfaction and retention of staff. As a result, job satisfaction and intent to stay suffer. Job embeddedness is a construct that measures reasons why employees remain in their jobs and has been linked to locus of control, engagement, job satisfaction, commitment, job performance and intent to stay. This descriptive study explored differences between the total job embeddedness, organizational and community dimensions of job embeddedness, job satisfaction, and intent to stay between registered nurses and healthcare assistants, and among three generations of hospital staff. Predictors of demographic data of registered nurses and health care assistants including education, shift worked, years of experience, and hours worked per week, as well as organizational job embeddedness subscales were also examined. A systematic review of the literature manuscript will be submitted for review regarding the association between locus of control, self-efficacy and job embeddedness. Awareness of these associations combined with knowledge about the reasons

why employees remain in their jobs can guide nurse managers on hiring requisites and incentives to improve retention rates.

Chapter One

Overview of the Research

Nursing is an evolving profession and is facing challenging changes and expectations. Hierarchical professional changes exert stress on registered nurse (RN) and health care assistant (HCA) relationships that result in professional conflicts. Hospital administrators strive to endorse excellent quality of patient care and financial profits that add to healthcare provider stress. Undefined job responsibilities and inefficient training of HCAs (Spilbury & Meyer, 2005), increased workloads (Furåker, 2008), quality of service expectations (Bosley & Dale, 2008), and vague guidelines about job sharing between RNs and HCAs (Jenkins & Joyner, 2013) result in job dissatisfaction and low retention rates in acute care facilities. Wieck, Dols and Landrum (2010) found that generational differences among healthcare employees add to job dissatisfaction and low retention rates.

Researchers have recently focused efforts on a relatively new concept in nursing: job embeddedness (JE). The JE theory (Mitchell, Holtom, Lee, Sablynski & Erez, 2001) seeks to explain job satisfaction and intent to stay differences among employees. JE explores reasons why employees remain in a job even if they are dissatisfied with current positions. JE is measured as a six dimensional construct of on-the-job and off-the-job forces that connect an employee to a job. Several studies were located that investigated JE in relation to locus of control (Ng & Feldman, 2011), engagement (Halbesleben & Wheeler, 2008), job satisfaction (Mitchell & Lee, 2001), commitment (Mitchell et al., 2001), job performance (Sekiguchi, Burton & Sablynski, 2008) and intent to stay (Reitz, 2014). Limited studies on RN JE, which included concepts such as retention and job performance in long term healthcare facilities (Reitz, 2010; Reitz, 2014; Reitz & Anderson, 2011), were available but no literature search revealed results for

acute care facilities. Studies regarding differences of JE scores between generations of healthcare workers in acute care facilities were also not documented in the literature.

HCAs are referred to as the backbone of nursing, but studies showed that their limited training and professional conflicts negatively affect patient care (Alhassan et al., 2013; Munn, Tufanaru & Aromataris, 2013; Potter & Grant, 2004; Spilbury & Meyer, 2005). Generational differences, in addition to hierarchical differences, can complicate relationships, work efficiency and ethical conduct (Macky, Gardner & Forsyth, 2008; Wieck, Dols & Landrum, 2010).

Strong relationships between JE and work related factors, such as engagement (Chaikongkiat, Aranyabhang, Sirichana & Muksikawan, 2012) and outcomes such as intention to stay (Reitz, 2010) have been demonstrated among nursing populations. A more comprehensive understanding about the differences in reasons why RNs and HCAs remain in their jobs, and the reasons why different generations remain in their jobs, might help nurse managers hire compatible staff in an effort to improve working relationships, retention and ultimately, patient outcomes.

Overall Purpose of the Study

The purposes of this study were to explore the relationships between JE of RNs and HCAs in an acute care facility and to determine differences in JE among generations of these two populations. Demographic data such as age, years worked, shifts worked, level of education, and organizational and community subscales were used to measure prediction of job satisfaction. Results from this study can provide nurse managers and administrators with guidance to retain employees by improving their degree of JE.

Introduction of the Articles

The first manuscript, "Linking Self-Efficacy and Job Embeddedness to Locus of Control in Nursing," introduced locus of control (LOC) as a mediator between self-efficacy and JE. LOC can be internal or external and is defined as an individual's perception of control over the success or failure of life events (Ng & Feldman, 2011). LOC and JE have shown a unique relationship among employees (Ng & Feldman, 2011) while internal LOC has been associated with self-efficacy (Reid, 2012). Campbell (2000) suggested that training and continual education to revert external locus of control to an internal orientation will complement organizational efforts to retain nurses because retention and job satisfaction can greatly depend on the person's perception of locus of control rather than external forces. The purpose of this manuscript was to reflect on a possible association between JE and self-efficacy with LOC as a mediator.

Managers who focus on employee locus of control and tailor continuous education programs and staff evaluations to meet the specific needs of internal and external locus of control employees, will create a work environment where each person will have opportunities to grow professionally, become embedded in their jobs, and make decisions to benefit the organization and patients. The relevance and importance of gaining an understanding of LOC as it relates to JE, may provide additional guidance to nursing managers and administrators regarding hiring and retention strategies through the attainment of professional relationships.

The second manuscript, "Job Embeddedness: The Differences between Registered Nurses and Healthcare Assistants," summarizes a descriptive quantitative study to investigate the JE differences, job satisfaction and intent to stay between RNs and HCAs, and among three generations of these two populations, in an acute care facility. Demographic data were used to predict job satisfaction. The findings revealed that RNs valued community sacrifices

significantly higher than HCAs. Total JE scores between baby boomers and millennials were significantly different, while organizational links scores among all three generations showed a statistically significant difference. Organizational fit, organizational sacrifice and level of education added statistical significance to the prediction of job satisfaction.

In conclusion, RNs might be well embedded in their communities but might not be embedded well enough at their particular organization or department to remain in their jobs, and may explore opportunities at other organizations or departments more freely than HCAs. Perceived value of HCAs to organizational sacrifices, community links and higher total JE scores can serve as significant guidance for organizations that are striving to increase employee retention rates. A focus on organizational links as a retention strategy might retain employees from all three generations.

Chapter Two

Linking Self-Efficacy and Job Embeddedness to Locus of Control in Nursing

Abstract

Internal locus of control is positively associated with self-efficacy and increased organizational job embeddedness and it empowers individuals to feel confident in their decisions to become actively engaged in organizational activities. These individuals believe that they are in control of their success and failures and that their personal moral values are equal to those of the company. They are able to negotiate unique contract deals and are aware of the value of social networking to secure resources that are necessary for success. Positive patient outcomes, high quality of care and retention of nurses may be enhanced with a focus on a potential employee's internal locus of control during the hiring process. This approach may facilitate the process of hiring individuals who have an internal drive to be successful; this in turn can help meet organizational expectations. Efforts to train those with an external locus of control to become more internally oriented can reap long term benefits regarding working relationships and patient outcomes. This topical review demonstrates how self-efficacy and job embeddedness are associated with internal locus of control as the mediator in nursing.

Keywords: *Locus of control, self-efficacy, job embeddedness, nursing*

Linking Self-Efficacy and Job Embeddedness to Locus of Control in Nursing

Self-efficacy and sound decision making in professional nursing are crucial to optimizing patient outcomes, especially when a patient's survival is in jeopardy. Nurses have to make choices for meeting immediate patient needs without having to second-guess whether these decisions will be supported by supervisors. A lack of managerial support has been shown to be one of the reasons that nurses experience job dissatisfaction and leave nursing (Farr-Wharton, Brunetto & Shacklock, 2012; Jong Kyung, Myung Ja, Se Young, Mi, & Kyoung, 2014). Seeking ways to improve nurse retention and job satisfaction is a continuous struggle for most nurse managers and administrators. Using the concept of job embeddedness (JE) as a hook to keep nurses employed and productive provides a framework for the nurse manager seeking retention best practices. Ng and Feldman (2011) linked personality traits, such as internal locus of control, to organizational JE and an employee's ability to participate in social networking, thus creating links within the business world to control success. Internal locus of control has also been linked to high perceived levels of self-efficacy, job satisfaction and high levels of patient caring efficacy (Reid, 2012). Clarifying the role that locus of control plays in nurse self-efficacy and dedication to stay on the job is only relevant if internal locus of control can be strengthened through education or other means. Interventions to augment internal locus of control in nurses may improve self-efficacy, JE and nurse retention.

The purpose of this topical review is to provoke an awareness of the significant role that internal locus of control may have toward the self-efficacy and JE of nurses. The literature review will explore how locus of control is related to the nurse's JE and self-efficacy and how this relationship can serve as a basis for designing nurse retention strategies. A topical review is

not an exhaustive literature review but rather explores developing concepts and serves as a guide for future research suggestions (Palermo, 2013).

Review of Literature

Search History

An initial literature search was conducted in EBSCO with the search terms: locus of control, perceptions of practice, self-efficacy, decision making and retention. The Boolean '*and*' was used, searching was expanded to '*within the full text*' and the publication dates were narrowed to 2005 - 2016. Limitations were added: Language (English), organizational commitment, job performance, motivation, attitude, work environment and job satisfaction. Scholarly periodicals included those in the fields of nursing management, psychology, educational research and evidence-based practice. Inclusion criteria for articles were any type of quantitative study conducted that measured or explored concepts of locus of control, self-efficacy, job satisfaction and intent to stay with nursing student and nursing populations. Each article was reviewed for reliability and validity.

The search yielded 25 articles; 16 articles were relevant and included in this review. Several recent researchers referred to older studies and theories in their articles. In an attempt to capture those articles, a second search was conducted with the same search terms, Boolean, limitations and journals, but the publication date was expanded to 1970 – 2016, yielding more than 1000 articles. Twelve of those older articles were cited in this review because theories and definitions from those first researchers still apply. A third search was conducted with the search terms of job embeddedness and locus of control. Only one relevant study was retrieved. Two additional studies related to job satisfaction and JE were also included; bringing the final number of studies included in this review to 31.

The studies were all conducted as quantitative designs by using survey questionnaires. None of the studies addressed the effect of cultural differences on locus of control perceptions. Some of these studies were not conducted in the USA but were included because the final results among nursing populations in various countries might advance the generalizability of this review.

Job Embeddedness

Mitchell et al. (2001) developed the Job Embeddedness Theory to determine why people stay in their current jobs. The theory is based on two dimensions (organizational and community) with three constructs (*fit* to role, *links*, and *sacrifices* when leaving). The first construct, *fit* to role, describes the employee's compatibility with the company and community, such as personal values, morals, and goals. The second construct, *links*, ties the person to the organization through such things as resources and information about the work, and to the community, such as children's activities and community involvement. The third construct, *sacrifices* when leaving, describes the employee's understanding of sacrifices if and when the decision is made to leave the job, such as compromising retirement funds, loss of job incentives, selling a house and moving away from the community. These elements tie together to define the depth of commitment the person has to the job and intent to leave or stay.

Holtom, Mitchell and Lee (2007) reported that the average turnover rate for all US companies in 2004 was 20.2%. In contrast, the top 50 of the 100 Best Companies incorporated components of job embeddedness into their retention strategies and had turnover rates of less than 10%. Reitz (2010) related job embeddedness positively to intent to stay among nurses in a rural hospital. A hospital in Arkansas had a 127% annual turnover of patient care intake specialists when they adopted the job embeddedness theory and focused strategies on the 'fit'

concept of the theory. They reduced their turnover to 15%. Another hospital in Illinois showed positive results by aiming their strategies on the 'sacrifice community' concept by offering down payment assistance for home purchases (Stroth, 2010). These statistical data show that organizational leaders might find consideration of employee JE worth their time and effort.

From an organizational JE perspective, Ng and Feldman (2011) identified internal locus of control as an antecedent for organizational JE. They demonstrated that employees with high levels of internal locus of control are able to obtain unique employment deals and make social networking connections. These employees feel more embedded in their organizations and experience these losses as higher perceived sacrifices when leaving their jobs. Forte (2005) demonstrated a positive association between managerial age and ethical decision making. These results are relevant when one considers that "over time, an organization's culture becomes perpetuated by its tendency to attract and retain people who fit its values and beliefs" (Newstorm & David, 1997, p. 103 as cited by Forte, 2005). The retention of people whose values and beliefs fit those of the company forms one of the main constructs of the job embeddedness theory (Mitchell, et al., 2001).

Locus of control is related to the person's degree of job embeddedness as a factor of dimensions of the job embeddedness theory, organizational commitment and identification with the community (Ng & Feldman, 2011). These authors investigated the relationship between locus of control and organizational job embeddedness and proposed that employees with a high internal locus of control have the ability to negotiate deals for unique contracts, within and outside the company, which improve the *person-fit-organization* concept. Secondly, these employees are more effective in developing social network resources (links) which will help them to ensure future benefits in their current companies, improving the *person-link-*

organization concept. Lastly, this network will strengthen the sacrifice construct, i.e. make the risk of leaving more of a sacrifice than the employee is willing to undertake, securing the *person-sacrifice-organization* concept. This study demonstrated that internal locus of control empowers employees to be more likely to acquire and retain valuable resources at work which enhances their sense of control over their environment and decision making, and positively impacts job embeddedness.

Locus of Control

Locus of control can be defined as an individual's perception of control over causes for success and failure. Individuals with an external locus of control believe that their surroundings, which can be the work environment and resources, control the events of their lives rather than anything that they personally do. They see themselves as victims of external forces in their environments rather than being in control (Chiu, 2003; Fitzgerald & Clark, 2013; Forte, 2005; Ng and Feldman, 2011). Individuals who have an internal locus of control attribute the causes of events and control over them to themselves. These individuals believe that they have the power to control their environment (Chiu, 2003; Fitzgerald & Clark, 2013; Forte, 2005; Ng and Feldman, 2011) and they have a perceived job security which produces confidence in their actions (Kren, 1992). In a study among child welfare workers, Fitzgerald and Clark (2013) associated internal locus of control with the ability to positively influence clients, taking personal responsibility for a client's well-being, successful goal accomplishments, and importance of success as a factor for future employment decisions. Research has shown that internally oriented Chief Executive Officers (CEOs) plan ahead, actively engage in activities at the business, lead rather than follow, consult specialists within the group, and involve these specialists in decision making (Boone 1988; Miller 1987). Lin and Ding (2003) showed that personal values have a

greater impact on work attitude for individuals with internal locus of control than for individuals with external locus of control. They also showed that the power of perceived behavioral control on ethical intentions is higher for individuals with an internal locus of control. A nurse with an internal locus of control might be more apt to see problems as challenges which can be controlled by specific actions. In contrast, a nurse with stronger external locus of control tendencies would see the problem as someone else's fault and be less likely to accept ownership and responsibility for finding a solution.

Locus of control in patient care. Previous life experiences and how these events are perceived by the person as being controllable or uncontrollable can influence future locus of control perceptions (Farin, Gramm & Schmidt, 2013). Negative experiences can have long lasting impacts on health regimes. In a study where the long term results after rehabilitation were evaluated among patients with chronic low back pain, the results showed that certain aspects of the patient-physician relationships (i.e. trust in the physician, satisfaction with care and patient participation) affect the outcomes. In addition, patients with certain risk factors such as gender, age, income, high work-related fear avoidance beliefs and external locus of control showed less improvement in their health statuses after rehabilitation (Farin et al., 2013). This finding highlighted the importance that previous health experiences play in perceived locus of control and the affect that this can have on patient outcomes.

Changing locus of control orientation. Changing patient locus of control to a more strengthened internal locus of control has been shown to result in improved patient outcomes (Morowatisharifabad, Mahmoodabad, Baghianimoghadam & Tonekaboni, 2010; Omeje & Nebo, 2011).

Rotter (1975) points out that locus of control can be changed, based on the social learning theory, but the change depends on various determinants such as experiences in similar situations, expectancies of particular reinforcement of behavior in that situation and the current psychological situation that the person perceives. "Expectancies in each situation are determined not only by specific experiences in that situation but also, to some varying extent, by experiences in other situations that the individual perceives as similar," (Rotter, 1975, p. 57). Ways to change an external locus of control orientation to a more internally-focused locus of control in health science were studied in more detail in the 1980's and 1990's. The purpose was to customize patient education appropriately and enhance compliance with treatments. Dishman, Ickes and Morgan (1980) and Coughlin, Badura, Fleischer and Guck (2000) found that patients with higher internal locus of control levels complied more effectively with physical activity programs than their counterparts. Fitzgerald and Clark (2013) showed that agency constrictions and organizational disinterest can push internal locus of control workers to become more externally oriented. Researchers became interested in nursing student training as a mean to change locus of control during the 1990's.

Locus of control in nursing academia. Researchers targeted nursing students in an attempt to re-direct locus of control before they enter the nursing profession as registered nurses. They showed that students with an internal locus of control demonstrated greater satisfaction with their programs than those with external locus of control (Ponto, 1999). In a study to determine the relationship between locus of control and problem-based learning, Mert et al. (2012) demonstrated a positive relationship between internal locus of control and autonomy in second and third year nursing students. Levels of internal locus of control increased from the first to third year and decreased in the fourth year when they were exposed to the clinical

environment and increased levels of stress. This is a significant finding because locus of control was changed during the program by tailoring the education to problem-based learning. Students were presented with problems that include various concepts and issues. They have control over their choices for problem-solving, which issues to concentrate on and how to approach the problems. They have a choice of resources to use while critical thinking skills and ethical techniques are integrated in the program. This approach facilitated internal locus of control development and enhancement. The locus of control orientations were later affected by the change in environment when the students were working in clinical areas and exposed to stressful environments. The author concluded that education can be a tool to change student locus of control to become more internally oriented, but more research is necessary to investigate this assumption. Determinants of nurse behavior remain a topic of interest. Improvement in professional behavior correlates positively with perceived self-efficacy (Lee & Ko, 2010).

Self-Efficacy

Self-efficacy was defined by Bandura (1982) as one's belief in one's ability to succeed in specific situations. Nurses are often involved in situations that require crucial decision making and quick action activities. Self-efficacy has been related to job performance (Bandura, 1982), to high self-esteem and job satisfaction (Judge & Bono, 2001), academic success of nursing students (McLaughlin, Moutray & Muldoon, 2008), personality traits such as optimism (Chang, Li, Wu & Wang, 2010) and internal locus of control (Reid, 2012).

In a study to examine the relationships between self-efficacy, locus of control, coping skills, caring efficacy, and job satisfaction of registered nurses, Reid (2012) demonstrated that general self-efficacy had a significant positive correlation with caring efficacy. In addition, these nurses showed a positive attitude about their practice environment and job. Reid asserts that

people with internal locus of control believe that they have control over their environments and that they find ways of dealing with work issues that create higher levels of involvement in the organization. Involvement in organizational activities and a personal fit with organizational values basically describes the job embeddedness theory.

Self-efficacy and locus of control. The relational premise guiding this discussion of evidence is that self-efficacy is more likely to occur when a person has an internal locus of control and feels control over and a commitment to the decisions made. If an internal locus of control provides the basis for linking decisions to something within the individual, then one must consider how confidence in internal self-directed actions can influence one's decision making. Those with low self-efficacy tend to ponder on previous life experiences, failures and self-doubts; hindering their motivation and commitment to achieve success (Coughlin et al., 2000; Jeffreys, 1998).

Self-efficacy and job embeddedness. Decision making among nurses remains a controversial topic because conflicts between organizational and personal morals and values might impact decisions. Cerit and Dinç (2013) demonstrated that nurses who have low professional behavior levels and who lack professional autonomy consider themselves unable to make critical decisions. Employees with a strong sense of internal locus of control believe that they can control their circumstances at work. They create resources and links to improve their social networking and strengthen professional ties. Employees with internal locus of control will, therefore, be able to demonstrate increased job embeddedness while also demonstrating high levels of self-efficacy.

Proposed Conceptual Model

Because retention of nurses and increased self-efficacy are such important issues in healthcare today, the issues of locus of control and job embeddedness are critically important to the future of nursing care delivery in the US. Based on the research to explore the relationships between internal locus of control, self-efficacy and job embeddedness, support has been offered for the following conclusions: a) Internal locus of control is positively associated with self-efficacy, and b) Internal locus of control is positively related to organizational job embeddedness, c) Job embeddedness and self-efficacy might be positively related with locus of control as a mediator and result in job satisfaction and intent to stay.

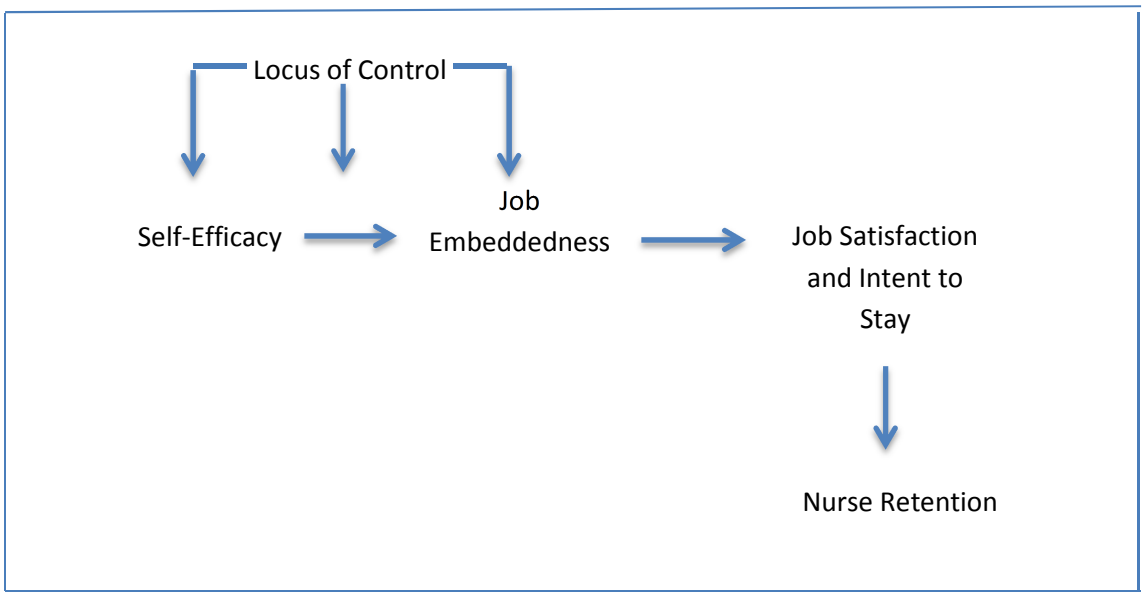

Figure1. Proposed Conceptual Model for Self-Efficacy and JE

Recommendations to Practice and Research

Retention and job satisfaction can greatly depend on the person's locus of control orientation rather than external forces. Training and education to revert external locus of control to an internal orientation will complement organizational efforts to retain nurses. Campbell (2000) demonstrated that nurses with internal locus of control experience greater levels of job

satisfaction and satisfaction with autonomy than nurses with external locus of control. Mantesso, Petrucka and Bassendowski (2008) reported an analysis of the effect of locus of control on response to peer feedback in nursing. They demonstrated that internal and external locus of control determined the degree of nurses' acceptance of and attitudes toward peer critique. This article was based on research by Naswall et al. (2005) that nurses with external locus of control react negatively to work demand and experience job insecurity.

Takase, Maude and Manias (2006) found that a positive relationship between control over the work environment and job satisfaction results in retention of the nurses. This significant outcome should be considered by organizational leaders to implement strategies that will focus on personal development (self-efficacy and internal locus of control) and a practice environment that will foster these strategies.

Nurses are typically hired based on academic performance, clinical interests, and nursing experience; they are not commonly asked or evaluated on locus of control perceptions. Thus, locus of control orientations among a diverse work group will be variable in any work environment. Nursing leaders have been searching for answers to job dissatisfaction, work stress, inability to retain employees, and measures to improve work performance and patient satisfaction. Critical attention to locus of control tendencies might provide the pathway to progress in the matters. A focus on specific issues related to internal and external locus of control might contribute to effectively bringing out the best in each employee.

An employee's perception of the work environment can impact decision making significantly. Situations in which employees want to act ethically, according to their personal morals and values, but are unable to do so will result in moral stress and intent to leave (Bandura, 1982). Furthermore, Takase et al. (2006) showed that nurses have an expectation of their roles

before they start a new job. Role discrepancy occurs when the actual role is not what they expected. A lack of power to exercise decision-making in hospital policy development, low levels of engagement, and inability to perform task delegation contribute to intent to leave. An environment where nurses are inspired to engage in various roles and are involved in work opportunities will improve retention rates. This is consistent with Reid's (2012) findings that nurses believe that they should be able to make decisions about their practices in order to function effectively. Outcomes of decisions might be directly related to a person's perception of causes for life events.

Nurses with internal locus of control have a sense of self-efficacy which enables them to make crucial decisions and value choices. They benefit from advanced job opportunities and greater responsibilities. Nurses with external locus of control tend to procrastinate and make excuses. They need deadlines and adequate time to complete assignments and benefit from one-on-one mentorship. Nurses need ongoing, professional development programs to enhance internal locus of control perceptions during initial and on-going employment. Managers may benefit from exploring employee locus of control to customize continuous education and evaluations to make feedback more meaningful.

Jong Kyung et al. (2014) found that improvement in hospital support for the work and patient care environments, as well as improvement in manager leadership skills, will reduce burnout and result in increased job embeddedness levels. Young nurses want feedback and personal attention from their managers (Wieck, Prydun & Walsh, 2002). If they take ownership and are rewarded, they are more willing to take ownership next time. Likewise, an environment where nurses are challenged with diverse professional opportunities and encouraged to explore various nursing roles will reduce turnover (Takase et al., 2006). Encouragement and positive

feedback, particularly when nurses with external locus of control step out of their comfort zone and take responsibility for choices or offer input into decisions, will reinforce the benefits of adopting a more internal focus for decisions and accountability. Strategies to increase levels of internal locus of control through continuous education and positive reinforcement may result in employee self-efficacy, job embeddedness and retention.

Conclusion

Nursing leadership has never been more challenging. Today's healthcare environment is overwhelmed by pressures to adopt increasingly complex technologies, address public skepticism about ethical decision-making processes, and to deal with fluctuations in the availability of a committed workforce. Organizational leaders strive to improve employee retention as a quality-improvement and cost-containment strategy. Additionally, it is the right thing to do to try to create an environment where employees can achieve at their highest levels of self-actualization and happiness. These employees find a personal fit within their jobs showing the ability to link resources to their benefit. They demonstrate their compatible personal morals and values with those of the organization by making decisions in line with employer expectations. Managers who focus on employee locus of control and tailor continuous education programs and staff evaluations to meet the specific needs of internal and external locus of control employees will create a work environment where each person will have opportunities to grow professionally. This win-win solution allows empowered employees to experience greater levels of job satisfaction and self-efficacy, become embedded in their jobs, and make decisions to the benefit of the organization and patients.

Chapter Three

Job Embeddedness: The Differences between Registered Nurses and Health Care Assistants

Abstract

Problem: Job embeddedness (JE) directly affects job retention and quality of service. Financial challenges for hospitals demand strategies to ensure superior patient satisfaction scores. Knowledge regarding JE of HCAs is lacking, and studies about the differences between JE of RNs and HCAs in acute care facilities could not be located. Job descriptions for HCAs in acute care facilities are extremely diverse, and RNs feel reluctant to assign responsibilities to HCAs. Job retention, job satisfaction, commitment, and professional relationships can potentially suffer as a result.

Methods: A descriptive comparative design was used to conduct the study. A convenience sample of RNs and HCAs from medical and surgical units at two Texas hospitals completed a survey of demographic data and one that measured JE variables of fit, link and sacrifice from organizational and community perspectives. Differences of JE between generations for RNs and HCAs were also assessed and compared.

Analysis: RNs valued community sacrifices significantly higher than HCAs. Total JE scores between baby boomers and millennials were significantly different, while organizational links scores among all three generations showed a statistical significantly difference. Organizational fit, organizational sacrifice and level of education added statistical significance to the prediction of job satisfaction.

Manuscript Two

Concerted efforts toward improving nurse retention and patient satisfaction continue to be high priorities for nurse leaders and hospital administrators. The financial implications of government demands for delivering quality patient care and ensuring superior patient satisfaction scores (Hospital Care Quality Information from the Consumer Perspective, 2013) augment the need for solutions to this matter. Nurses are known to have a major influence on patient satisfaction scores, and these scores have been linked to nurse job satisfaction and nurse retention (Halbesleben &Wheeler, 2008). The nursing profession is challenged to balance employer and personal expectations and needs while ensuring patient safety and quality of service.

Nursing is a growing, evolving profession that is facing substantial challenges to stay abreast of scientific advancements. Changes in the responsibilities of registered nurses (RNs) have shifted many of the former RN responsibilities to lower hierarchical ranks, such as to licensed practical nurses (LPNs) and health care assistants (HCAs). However, studies have shown that working relationships among nursing ranks are affected negatively by these changes and as a result can become conflictual (Jenkins & Joyner, 2013). HCAs have become more involved with direct patient care, and a major reason for this is that RNs have been expected to delegate more responsibilities to HCAs. However, professional growth for both provider roles has not kept up with this trend.

Generational differences in the workforce have added to these challenges. While the merging of generations might have contributed to a more diverse blend of clinical experiences and promoted quality of service, differences in attitudes and values have created conflict (Hendricks & Cope, 2013). The resulting stress and job dissatisfaction have contributed to

increased turnover rates and patient dissatisfaction with quality of care (Butler-Williams, James, Cox & Hunt, 2010).

Hospital challenges to promote harmony in the workplace do not stop with generational issues. The relationships between RNs and HCAs are extremely diverse between individual employees, shifts, and units (Butler-Williams et al., 2010). This diversity may have a negative impact on patient safety, patient satisfaction, job satisfaction, and retention of nursing staff. In addition, the level of trust and job sharing between RNs and HCAs depend on the relationships that they have (Jenkins & Joyner, 2013). Inconsistent training and undefined job descriptions may add to RN reluctance to accept HCAs as key members of the health care team.

Previous studies demonstrated that locus of control (LOC), levels of engagement, job satisfaction, job commitment, job performance, and intention to stay can vary significantly among employees from the same and/or different disciplines and between different generations, in an organization (Chung et al., 2010; Halbesleben &Wheeler, 2008; Hendricks & Cope, 2013; Ng & Feldman, 2011; Reitz, 2010; Welbourne, Johnson & Erez, 1998). These variances were related to JE in industrial and healthcare environments. The purpose of this study was to investigate the differences between JE, job satisfaction, and intent to stay of RNs and HCAs and among three generations in an acute care hospital. Predictors of demographic data, community and organizational fit, link, and sacrifice subscales for job satisfaction were also examined. Answers to these questions may guide employers to address factors that can positively influence JE and ultimately improve organizational outcomes. Mitchell et al. (2001) conceptualized JE of employees in their JE Model as an explanation of the reasons why people stay in their current jobs. An adaptation of the JE Model (Mitchell et al., 2001) will guide this study to investigate

the differences of JE between RNs and HCAs in acute care and how demographics predict job satisfaction.

Literature Review

Development of the JE Theory

JE can be defined as "the combined forces that keep a person from leaving his or her job," (Yao, Lee, Mitchell, Burton and Sablynski, 2004, p. 159). It is an awareness that people have of a perceptual life space in which certain aspects of their lives are connected. These concepts are linked to each other in different ways, tighter to form a net, or loosely, which can easily be broken. It is this 'weaving' of the concepts that form the core principal of JE. This weaved net connects the person to organizational (on-the-job) and community (off-the-job) dimensions of life. The total level of JE is measured as a whole, rather than as individual aspects.

Mitchell et al. (2001) introduced JE in a study that explored reasons for why grocery store and hospital employees stay at their jobs. An aggregate multidimensional construct of JE with six dimensions was formed and used as a model to conduct a second study. The additional survey data from the second study was applied to refine the construct (Mitchell & Lee, 2001). The model was once again revised by Lee et al. (2004) and has since been used as the most recent JE Model.

Lee et al. (2004) hypothesized that certain off-the-job and on-the-job forces will embed a person in a job and prevent the employee from leaving. The theory is thus dedicated to reasons why people remain in a job, and not to reasons why people leave a job. They determined that employees who are embedded in their jobs negotiate links within the company and community which tie them to the job and enable them to build a network of resources. Secondly, personal

norms, values and goals that fit with those of the organization and community are important reasons to stay with a job. Lastly, employees' perceptions of what they have to give up if they decide to resign carry enough weight to be considered as a major concept of JE. These three concepts, *links, fit* and *sacrifice* within the dimensions of organization and community provided the framework to develop a measuring tool to predict the likelihood of employees to remain at a job. The JE theory is thus based on the perception that higher organizational and community embeddedness reflects more *links*, a better *fit*, and more *sacrifices* if the employee decides to quit (Lee et al., 2004; Mitchell et al., 2001; Mitchell & Lee, 2001). In later studies, internal LOC, increased levels of engagement, job satisfaction and job performance were also associated with higher levels of JE, intention to stay and customer satisfaction (Bargagliotti, 2011; Karatepe, 2013; Karatepe & Karadas, 2012; Lee et al., 2004; Lee, S., Lee, D., & Kang, 2012; Reitz 2010; Lerner, Resnick, Galik & Flynn, 2011; Rosen, Stiehl, Mittal & Leana 2011).

Internal LOC and JE

LOC can have an impact on an employee's attitude toward work related events and has been demonstrated to have a distinctive relationship with JE among managers from the sample pool of a professional research firm (Ng & Feldman, 2011). LOC can be internal or external and is defined as an individual's perception of control over the success or failure of life events (Ng & Feldman, 2011). Individuals who have an internal LOC take the responsibility and credit for causes that affect life events; they believe that they have the power to control their environment. Individuals with an external LOC believe that they do not have personal control over their surroundings and will contribute events in their lives to their surroundings and other circumstances (Lin & Ding, 2003). They view themselves as victims of external forces in their environments rather than being in control. Ng and Feldman (2011) investigated the relationship

between LOC and organizational JE and found that employees with the ability to negotiate unique contracts have internal LOC characteristics; these individuals are able to improve the organizational-fit concept through their negotiations. These employees also improve the organizational-link concept by showing the ability to develop social network resources (links). Improved fit and links concepts lead to improved organizational engagement and job performance (Bakker, 2011).

Engagement and JE

Engagement is a well-studied concept and is related to job performance, job satisfaction and organizational citizenship (Bakker, 2011; Bargagliotti, 2011; Chaikongkiat et al., 2012; Halbesleben & Wheeler, 2008; Mitchell et al., 2004; Salanova, Agut & Perro, 2005). Halbesleben and Wheeler (2008) conducted a longitudinal study to investigate the relationship between engagement and JE in the prediction of job performance and intention to leave. They studied US employees from a wide variety of industries and occupations and demonstrated that JE and engagement are distinctive constructs despite strong similarities in their theoretical bases. Their findings are consistent with those of Mitchell et al (2004) in that JE shared a distinctive variance with turnover intention. Contrary to other studies (Koyuncu, Burke & Fiksenbaum, 2006; Saks, 2006) they found that engagement did not strongly relate to turnover intention, but also acknowledged several limitations to the study that could have impacted this finding. They demonstrated a positive correlation between JE and engagement but also warn that each construct is distinct, with different outcomes. While engagement contributes to JE and job performance, employers should remember that engagement is related to differences in the job environment.

Work engagement can be defined from two perspectives: the person's experience with the organization and the person/organization interaction. Bargagliotti (2011) describes the first perspective as a "positive, fulfilling work-related state of mind" (p. 1417) and engagement as a "with-in person experience" (p. 1417). The person/organization interaction means that the person is focusing energy toward the organizational goals (Bargagliotti, 2011). Each job has demands and resources to achieve goals. Demands require effort from the employee, who therefore needs resources to fulfill the requirements. Personal and job resources are consequently interrelated as demonstrated by the JE model's dimensions, link, fit and sacrifice within the organization and community. A depletion of resources to meet the demands increases stress levels and promotes burnout. In contrast, adequate resources reduce the personal cost to do the job and improve engagement (Bargagliotti, 2011). Job resources, such as autonomy and trust should be present for work engagement of professional nurses to occur (Bargagliotti, 2011; Chaikongkiat et al., 2012).

In a concept analysis of the antecedents and consequences of engagement, Bakker (2011) concluded that involved employees not only perform better, they are able to act proactively and independently to initiate job related tasks. Job ownership increases organization fit and links because employees can fit their job to their level of experience and ability while meeting their preferences and needs, and therefore become more engaged and satisfied. Salanova et al. (2005) studied hotel and restaurant employees and found that engagement was related to increased levels of customer-perceived job performance and increased levels of customer loyalty. Engagement is an attribute that is necessary to build connections between people and the organization (links) and for the person's compatibility and comfort with the work environment (fit) which increases job satisfaction (Mitchell et al., 2001).

Job satisfaction and JE

Mitchell et al. (2001) described job satisfaction as the perceived desire to leave a job. From a different perspective, Crossley, Bennett, Jex and Burnfield (2007) defined job satisfaction as the degree to which people like or dislike their jobs. Strong predictors for job satisfaction are autonomy, meeting career expectations, maintaining a work-life balance and departmental leadership (Chung et al., 2010). Lerner et al. (2011) demonstrated that HCAs placed more importance on feedback and interpersonal relations than on recreation, job benefits, work performance and rewards. The HCAs in their study did not identify the work environment and job content as important attributes to job satisfaction.

In partial contrast, Natan and Becker (2010) showed in a comparison between RNs and HCAs that RNs were more dissatisfied with intrinsic motivators such as interpersonal relations, while HCAs were more dissatisfied with extrinsic motivators such as benefits. This observance is supported by another study conducted by Rosen et al. (2011), where a positive correlation was identified between high turnover and fewer benefits as the most important extrinsic factors for job dissatisfaction among HCAs. Ouzouni, & Nakakis (2009) demonstrated that lack of resources, especially inadequate staffing, contributed significantly to a moderate level of stress in HCAs who worked in a mental hospital.

Chan, Leong, Luk, Yeung and Van (2009) explored the differences in factors related to job satisfaction between two groups of nurses. The results demonstrated that leadership should acknowledge that differences in characteristics, such as age, education level, work experience and intention to change career when addressing job satisfaction among nursing staff. This study showed that a 'one size fits all' model will not produce accurate results when job satisfaction and intention to leave between RNs and HCAs are measured. The results are relevant to this study

because it shows how the different dimensions of JE can vary between each population's job satisfaction and intent to stay.

Mitchell and Lee (2001) related job satisfaction to JE in a study to explain voluntary turnover with employees at a large financial institution. Job satisfaction is an on-the-job construct with statistically significant correlations to individual image (the fit-organization sub-dimension) and organizational commitment (link-organizational sub-dimension) while community-based sub-dimensions demonstrated lower correlations. Mitchell et al., (2001) proposed that a person can like a job without JE being present. Although closely related, JE is not the same as job satisfaction. Job satisfaction focuses on job-related factors, while JE narrates to organizational-related and community-related reasons why people remain in their jobs. Factors that can affect a person's perspective of the job negatively can create an intention to leave, while factors that promote JE can increase intention to stay. Items to evaluate job satisfaction were built into the organization-sacrifice concept, such as benefits and compensation. Job satisfaction can therefore, be one of the reasons to stay in a particular role and with a particular employer.

Commitment and JE

Job satisfaction and commitment were intertwined with the dimensions links, fit and sacrifice in a subsequent study (Mitchell et al., 2001). A person's commitment can be linked in two ways: Organizationally (constituent commitments), such as working on job-related projects, and relationally, such as interconnecting with colleagues in ways that can impact attachment to a job. Community commitment (behavioral commitments) such as helping others or serving as a public representative for a company can also influence attachment to a job. The Allen and Meyer (1990) three-dimensional model is the most widely used model to measure organizational

commitment and addresses commitment in the organization, but not the community as the JE model does. The Allen & Meyer (1990) model dimension, affective commitment, is a person's positive feelings about a job, which can be measured as an emotional affection towards the job. The JE model illustrates commitment within the fit-organization dimension and reflects some aspects of affection toward the job, but it also includes a fit within the community. The second dimension, normative commitment, refers to the employee's sense of obligation to stay in a job. The JE model has added items to this dimension, such as teams and committees on which the person serves. The last dimension, continuance commitment, measures entities that people feel they would have to sacrifice. The JE model incorporated these entities, but unlike Allen and Meyer's model, it includes job alternatives and specific entities such as freedom, retirement benefits, healthcare and compensation (Mitchell et al., 2001).

In a more recent study, Karatepe and Karadas (2012) identified rewards, training and empowerment as important indicators of commitment to quality of service. They speculated that JE will increase if these indicators are present and that this will increase commitment. The outcome measure, service recovery performance, showed a positive relationship between JE and rewards, training and empowerment.

Job performance and JE

Studies that explored concepts affecting job performance found a direct relationship to employee engagement (Halbesleben & Wheeler, 2008; Salanova et al., 2005; Welbourne et al., 1998). In their quest to develop a reliable measurement tool for job performance, they found that employees enact different roles within an organization. The jobholder role (required role) represents the employee performance view while the organization member role (non-required role) involves organizational citizenship. Different forms of compensation are shown to

encourage role-related behavior. For example, individual incentives such as merit pay increases affected the saliency of job roles while profit sharing affected the organizational citizenship role. In addition, career role, team role and innovator role were identified as important considerations to improve job performance. Career role can be enhanced through directly applied incentives such as skill-based pay or promotion, and indirectly through a shared responsibility between employer and employee to take part in career planning. Employees should take responsibility to improve job performances and make themselves valuable for their employers, while employers should offer opportunities for improvement. The promotion of team work becomes an increasingly important concept in organizations because incentives, which are based on enhanced team behaviors, will encourage cooperation between team members and teams and ultimately result in improved job performance. Finally, innovator roles will benefit the job role and organization, indicating that companies should promote entrepreneurship to improve effectiveness in the organization (Welbourne et al., 1998). This study complements the JE theory because employees who participate in these roles apply the basic JE concepts to their work efforts. The career role will enhance the fit-organization concept. The team role will enhance the link-organization concept and the innovator role will benefit the fit-organization and sacrifice-organization concepts. Job performance increased as a result in this study.

Sekiguchi et al. (2008) investigated the role that JE has on organizational citizenship behavior and job performance. This study was an analysis of two studies that involved 367 employees and 41 supervisors in manufacturing and telecommunication settings. It revealed that employees with high levels of JE, but low levels of leader relationships and self-concept of ability and importance, can feel "stuck" in their positions, resulting in weaker job performance than employees with low levels of JE. This result is based on the assumption that employees

with high levels of JE react more intensely to situational cues than members with low levels of JE. This study demonstrated that high levels of JE will increase job performance and quality of service, but managers should make efforts to increase the quality of leader relationships and members' self-concept of capability and significance. Likewise, Karatepe and Karadas (2012) showed the mediating role of JE on manager commitment and service recovery performance, and that JE triggers employee performance if the employees are rewarded and empowered.

Lee, Mitchell, Sablynski, Burton and Holtom, (2004) investigated the association between organizational (on-the-job) and community (off-the-job) JE on citizenship behavior, job performance, turnover and absences. They demonstrated that organizational JE related positively to citizenship behavior and job performance, while community JE related negatively to turnover and absences. Therefore, employers who make efforts to increase organizational and community JE will see improved citizenship behavior and job performance, while turnover and absences will decrease. Holtom, Mitchell and Lee (2007) reported that the average turnover rate for all US companies in 2004 was 20.2%. The top 50 of the 100 Best Companies incorporated components of JE into their retention strategies and decreased their turnover rates to less than 10%.

Intent to stay and JE

In a nine dimensional study to investigate the JE of Pakistan governmental employees (Sissique & Raja, 2011), components of JE were further analyzed by individually comparing fit, links and sacrifice to three conditions: Organization, community and family. Organizational links, organizational fit and job fit were positively related to intent to stay. Community embeddedness did not show a significant relationship to intent to stay.

Positive relationships between JE and intent to stay for nurses in rural (Reitz, 2010), urban (Reitz & Anderson, 2011), and long term facilities (Reitz, 2014) have been demonstrated.

A hospital in Arkansas reported a 127% annual turnover of patient care intake specialists before they focused retention strategies on the 'fit' dimension of the theory and reduced their turnover to 15% (Reitz, 2010). A rural hospital in Illinois reported positive results by aiming their nurse retention strategies on the 'sacrifice community' dimension by offering down payment assistance for home purchases (Stroth, 2010).

Reitz and Anderson (2011) suggested that retention programs should incorporate the JE Theory as a tool to retain nurses. In a more recent study Reitz (2014) again supported the JE concept, suggesting that long term care facilities can benefit from retention programs that focus on measures to retain nurses, rather than trying to prevent nurses from leaving. Hamlin (2013) demonstrated the need for nurse educator retention programs through finding a correlation between JE and intention to leave among full-time nursing educators.

Generational Differences and JE

Generational differences became a widely studied concept in an effort to improve employee retention and job satisfaction (Kupperschmidt, 2000; Macky et al., 2008; Pew Research Center, 2010; Schullery, 2013; Wieck et al., 2010; Young, Sturts, Ross & Kim, 2013). Generation is defined as an "identifiable group that shares birth years, age, location, and significant life events at critical developmental stages" (Kupperschmidt, 2000, p. 66). Experiences such as wars, economical changes and socio-cultural differences during the life span of each generation form and shape that generation to develop identifiable attitudes, values and beliefs. These differences are portrayed in work environments and have become an important concept for employers who are striving to retain employees and ensure effective, quality of service (Macky et al., 2008).

Generations are broadly classified by birth years. Veterans were born during the years of 1920 to 1945 and were exposed to World War II and The Great Depression. They are hard workers who place high value on dedication and loyalty. Baby Boomers were born 1946 to 1964 and experienced the post-war stress and radical social changes such as the Civil Rights movement. They are described as self-absorbed and motivated by money and self-gratification. Gen Xers were born 1965 – 1981 and hold several conservative family values but they also strive to balance work and leisure and act independently and realistically (Pew Research Center, 2010).

Millennials were born during the time from 1982 to 1999 and are also known as the Net Gen. This generation was introduced to computers and electronic games from young ages because overly protective parents encouraged indoors activities rather than outdoors. A great portion of the current workforce is made up by this generation, (Schullery, 2013). Schullery examined the Millennial processing of engagement in a learning environment and concluded that they thrive on a desire to succeed in their jobs, are self-directed, use critical thinking and they expect immediate application to what they have learned, and as a result he suggested that student-directed methods should be applied to this generation.

Young et al. (2013) studied the differences in job satisfaction among Baby Boomers, Gen Xers and Millennials and found that Baby Boomers are mostly more satisfied with their jobs than the other two generations. They suggested that managers pay attention to career needs, job expectations, job challenges and communication to balance generational differences between employees. This result is supported by Wieck et al. (2010) who recommended that administrators should focus retention strategies on generational differences and needs. Employees with leadership potential should be identified early on in their careers and should be trained and rewarded in accordance to their generational values.

Although many studies addressed generational values and differences no studies that compared JE and generational differences in acute care facilities could be located. Research overwhelmingly separates the Millennials from the other generations with regard to expectations, learning preferences, attitudes, job satisfaction and engagement (Kupperschmidt, 2000; Macky et al., 2008; Pew Research Center, 2010; Schullery, 2013; Young et al., 2013).

The Role of HCAs in Health Care Settings

Nursing staff in acute care facilities includes RNs, LPNs and non-licensed HCAs. Alhassan et al. (2013) noted that RNs are responsible for their own decisions and actions as well as those of HCAs. The nomenclature for HCAs is diverse and includes aides, support staff, nursing assistants, certified nursing assistants and patient care assistants (Munn et al., 2013). HCAs have been credited for providing the greater part of basic bedside nursing care, and known as the back-bone for the health care system (Potter & Grant, 2004; Spilbury & Meyer, 2005). Their minimal, inconsistent training raises concerns about their role perceptions, attitudes and job satisfaction (Butler-Williams et al., 2010; McGloin & Knowles, 2005; Potter & Grant, 2004; Spilbury & Meyer, 2005). Spilbury and Meyer (2005) found that communication between HCAs and RNs depends on their professional relationships and trust rather than systematic processes and that this can potentially cause a negative impact on the quality of patient care. Jenkins and Joyner (2013) confirmed that HCA responsibilities depend on relationships with RNs and mostly replace the responsibilities previously associated with LPN/LVN roles. Many hospitals are phasing out LPN/LVN positions, leaving a 'gap' in nursing practice. LVNs/LPNs are licensed to fulfill many RN responsibilities (with the exception of a few) and are expected to also help with HCA responsibilities; serving as a 'bridge' between RNs and HCAs. HCAs are not trained or

licensed to fulfill LVN/LPN roles, while RNs are reluctant to assign some of the LVN responsibilities to HCAs.

Furåker (2008) explored concerns about quality of care and concluded that heavy demands and lack of training and autonomy have a negative effect on motivation and job satisfaction among HCAs. Bosley and Dale (2008) measured service quality in nursing homes from internal customer (employee) and external customer (client) views and found that quality of care is associated with HCAs attitudes, and that engaged, committed staff will strive to improve organizational performance. Studies demonstrated that some healthcare organizations hire less RNs and more HCAs as a cost cutting measure, and as a result, negatively impact professional relationships and quality of care (McIntosh & Smith, 2012; Shearer, 2013).

Simpson (2010) demonstrated that self-esteem of HCAs in a long term care facility was negatively related to job satisfaction and positively related to self-efficacy, but none of these variables were related to job performance. The author attributed these results to confounding work-related variables and suggested more research to investigate the mediating effects of job characteristics and organizational characteristics on job satisfaction and job performance.

Although the effect of JE on RN retention (Halbesleben & Wheeler, 2008) and job performance behavior (Hamlin, 2013; Reitz, 2014) in acute and long term care facilities has been studied, no similar research related to HCAs in acute care facilities could be found. However, several studies showed relationships between stress and job dissatisfaction (EngstrÖM, Skytt & Nilsson, 2011; Parmelee, Laszlo & Taylor, 2009), and engagement and job performance (Parsons, Simmons, Penn & Furlough, 2003; Simpson, 2010) of HCAs in nursing homes. HCAs often feel devalued, non-used and misused (Bosley & Dale, 2008; Spilbury & Meyer, 2005; Thornley 2000).

EngstrÖM et al. (2011) demonstrated that employees with no formal education, such as HCAs, perceive more stress symptoms and job dissatisfaction than more educated employees. They concluded that employees with less formal education are made aware that they have less competence to do the job, yet are expected to take more responsibility and are told that their quality of service is lower than those of formally educated employees. The researchers were surprised to find that innovations to enhance professional conduct, efforts to improve outcomes, and fostering of work relationships did not alter the differences in job dissatisfaction.

Parmelee et al. (2009) conducted a study to evaluate perceived barriers to job performance among a large sample of HCAs who attended the National Association of Health Care Assistants National Conference in 2006. This sample was representative of rural and urban HCAs. Heavy workload and lack of teamwork were identified as the major contributing factors to job performance problems. Lack of respect from nurses, training of new staff, exclusion from routine processes and communication, and work stress were among the six most important factors. Urban HCAs reported higher levels of frustration for every factor, except job stress. In relation to JE, the authors speculated that the differences in job market, availability of other jobs and a weaker sense of community among urban HCAs can explain the difference.

Parsons et al. (2003) found that older HCAs who have been in their jobs for many years and had no intentions of advancing their education were more likely to stay. This might be an indication of organizational and community links and sacrifice. Personal opportunity was the most significant indication of intent to leave, followed by supervision issues and being kept informed (engagement). Additionally, employee relationships were indicators of reasons to stay, but not to quit. This result is linear with the significance of the JE organizational links concept.

JE in Nursing

Strong relationships between JE and work related factors, such as LOC (Ng & Feldman, 2011), engagement (Chaikongkiat et al., 2012), job satisfaction (Lerner et al., 2011) and outcomes such as job performance (Spilbury & Meyer, 2005) and intention to stay (Reitz, 2010) have been demonstrated among nursing populations. Of particular importance are findings of negative consequences that JE can have on certain populations. Higher stress levels in rural nurses were explained by their lack of 'freedom' to explore other jobs, strong links to their communities, and higher sacrifices if they quit (thus being stuck in the JE net) (Reitz, 2010). Parmlee et al. (2009) explored the relation between exclusion in processes and job dissatisfaction among nursing assistants and demonstrated the importance of JE concepts of organizational fit (mutual values and goals) and links (resource support to do the job). The impact of high turnover rates can include financial implications for the organization, affect patient safety, lower the quality of patient care and ultimately affect the organization's 'healthy environment,' (Riahi, 2011).

No studies could be located that examined the difference in JE of RNs and HCAs. Therefore, the current study was aimed to examine the differences of JE, job satisfaction and intent to stay between RNs and HCAs in an acute care facility. Furthermore, this study was also intended to assess the differences in JE, job satisfaction and intent to stay among generations of health care workers in an acute care facility. Factors which can predict job satisfaction were also explored.

An identification of how the crucial concepts (*links, fit* and *sacrifice*) relate to JE for each population will guide strategies to improve work relationships. Efforts to improve professional relationships and JE levels of staff will likely influence patient satisfaction rates positively and

may increase patient trust and intention to refer the hospital to others. Improved patient satisfaction scores may also result in a financially profitable outcome.

Theoretical Model

An adaptation of the first version of the JE Theoretical Model (Mitchell et al., 2001) will be used to guide this study (Figure 2). The initial model was developed to determine why people stay in a job after they encountered a career shock. A career shock can be described as an event that can be expected or unexpected and shakes the person with respect to his thinking about the job. This can result in a negative, positive or neutral evaluation of their job (Mitchell et al., 2001) and play a role in the decision process (Unfolding Model) of whether to stay in a job or not. In a subsequent study, Mitchell and Lee (2001) described the decision paths (Unfolding Model) that an employee will follow to decide whether to quit or stay in the current job after a career shock occurred. How the individual initially interprets the shock will depend on personal characteristics and experiences. The person will search for previous reactions to similar circumstances, and prior decisions and judgments about the decisions that were made. At this point quitting can be an automatic outcome. This reaction is called a Path I response that reflects a spontaneous reaction that led to quitting their job with no evaluation of the job or job searching having occurred. In the second response, Path II, the person develops judgments about the values of the job and compares it to personal beliefs. Furthermore, the person will evaluate personal goals and accomplishments and will decide if the shock can be integrated into judgments and if it will pass acceptability thresholds. This decision can lead to two options: staying with the company or leaving. Job searching does not occur in a Path II outcome; the decision is based upon compatibility of personal and organizational values, beliefs and goals, and commitment to the company. The third path follows the same route as Path II, but a 'not

compatible' decision is made and searching for alternative jobs occurs. This might result in a detailed search, which can take a long time, or the person might be in a highly recruited status, resulting in expedited favorable job opportunities.

In contrast with Paths 1, II, and III, Path IV is not initiated by a shock. The employee becomes dissatisfied as a result of evolving personal or organizational changes until there is no fit with or commitment to the job anymore. Job searching will occur over a period of time until the person finds a compatible opportunity. Mitchell and Lee (2001) indicated that increased JE may deflect the implications of shocks and dissatisfaction, while employees with low levels of JE may revert to job searching and leaving when a shock occurs.

Although the Unfolding Model was influential in the formulation of the JE Theory, it is crucial to remember that the JE Theory was based on the reasons why employees decide to stay in a job, not on the reasons why they decide to quit. Mitchell and Lee (2001) determined that three major dimensions will result in JE: (1) the attachments that employees have to the job and community (links); (2) the extent to which they experience a good compatibility with the organization and community (fit); and (3) the degree to which they have to give up things if they decide to quit (sacrifices). Of equal importance to this discussion is an explanation of how commitment and job satisfaction were weaved into the JE Theory by Mitchell and Lee (2001).

Specific questions related to healthcare workers were incorporated in the initial survey to provide a model that is appropriate for healthcare workers. The most current model (Lee et al., 2004) was developed for any industry and does not relate to hospital specific issues. The adaptation involved adding job satisfaction and intent to stay as proposed outcomes to the JE model while allowing for the impact of specific personal characteristics of the individual. Adding these items to the model provide a basis for determining the how the subscales

measuring links, fit, and sacrifice may guide the nurse administrator to adopt successful retention strategies.

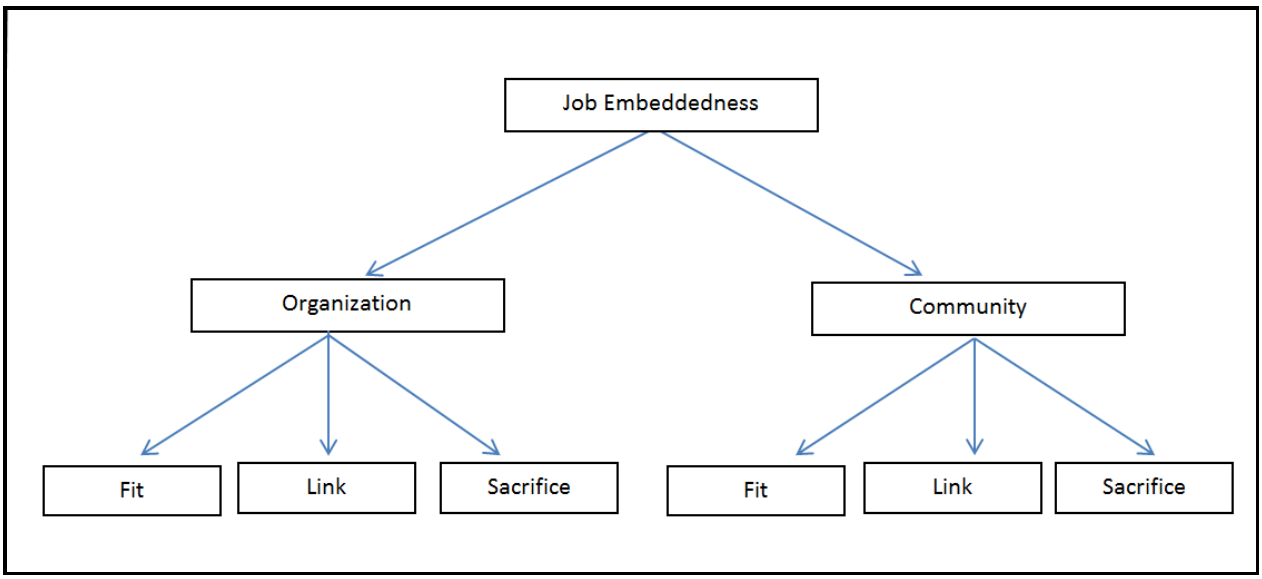

Figure 2. JE Model (Mitchell et al., 2001)

Links

Links are defined as "formal or informal connections an individual has with other individuals or groups either on or off-the-job" (Mitchell et al., 2001, p. 216). They can be described as strands that create a web to connect the person to the job and community. The more strands involved, the tighter this web will be. Some of these links might be more important than others. On-the-job links are based on relationships that employees have with other peers. They might have tight friendships with other co-workers and decide to stay because they value these friendships more than their dislike of the company. Commitments as a team member such as letting other people, teams and projects down, might be valuable and important enough to decide to stay.

Off-the-job links are also likely to have an impact on a decision to stay. Relationships with close friends and family will add pressure to decision making; a married employee with

children will be less likely to leave than an employee with no off-the-job links. Social club, sporting and church involvement can potentially add pressure to stay. These pressures are called normative influences (Lee et al., 2004; Mitchell & Lee, 2001; Mitchell et al., 2001).

Fit

Mitchell and Lee (2001, p.218) defined fit as "an individual's compatibility with their work and non-work settings." The individual's personal norms and values must fit with those of the company. In addition, the person who is more satisfied with his environment (culture, climate, amenities and activities) will find these aspects important when challenged to quit (Lee et al., 2004; Mitchell & Lee, 2001; Mitchell et al., 2001). Numerous studies during the 1980's – 1990's about person-organization fit showed that a better fit will improve retention (Mitchell & Lee, 2001). Employees who found that their goals and ambitions are in line with those of the organization are more likely to stay. No research was done at that time regarding off-the-job fit predictors such as cultural influences, climate and community benefits, thus prompting Mitchell and Lee (2001) to investigate the importance of a good fit with these predictors. They found that a good community fit, in combination with the other dimensions can play a role in retention. They also hypothesized that link and fit do not affect each other and can be independent to the person's view about the job.

Sacrifice

The third concept of the model, sacrifice, "…implies the perceived cost of material or psychological benefits that may be forfeited by leaving a job," (Mitchell & Lee, 2001, p. 1105). However, sacrifices can include much more than financial losses, such as stock options or benefit plans that might be forfeited when quitting. Other on-the-job sacrifices that are more subtle include structured losses (opportunities for advancement, job stability and job training) or

institutional losses (experiences and knowledge which help people to cope and succeed). Other losses could be, for example, better office locations for people who stay or just the convenience of knowing the strengths and weaknesses of people they work with. Off-the-job sacrifices become more important if the individual has to move and can include the cost of moving, giving up a house, schools or personal investments. The conveniences of a short commute to work, company car or free day care are more examples of sacrifices. These concepts were identified by Mitchell and Lee (2001) as significant enough to be included in the JE model.

The JE Model (Mitchell ,et al., 2001) was adapted to determine if it can contribute efficiently to the prediction of job satisfaction and retention in nurses and health care assistants. Certain personal attributes are also postulated to add to the predictive nature of the model. The adapted model (Figure 3) will be tested in this study for the purpose of providing nurse managers with direction for retention efforts for both levels of employees.

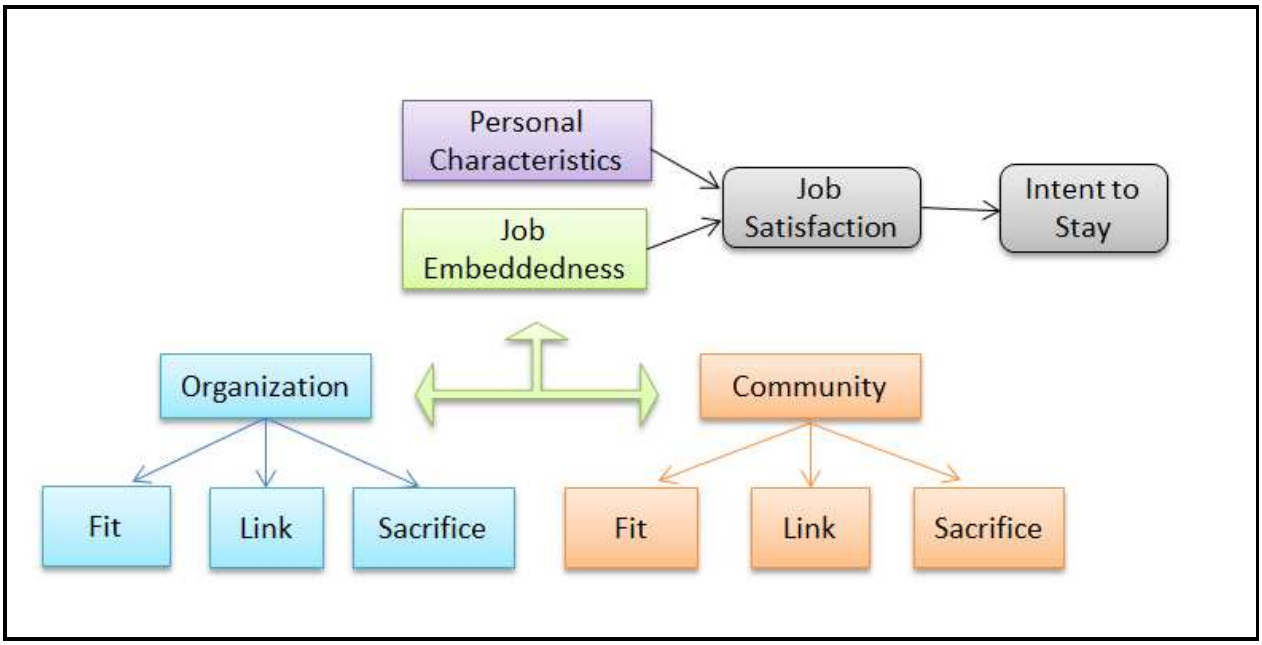

Figure 3. Adapted JE Model for Retention of RNs and HCAs

Methods and Procedures

Design

A descriptive comparative design was utilized in this study to determine differences between the total JE, organizational and community dimensions of JE, job satisfaction, and intent to stay between RNs and HCAs, and between three generations of hospital staff. This study also examined demographic, community and organizational fit, link, and sacrifice subscales as predictors for job satisfaction.

Sample

The study was conducted in the medical and surgical inpatient units at two acute care medical facilities in north central Texas. The nurse to patient ratio and levels of patient care on these units were comparable across the units. RNs and HCAs who were employed by the organization and who worked in the identified medical and surgical units were recruited to participate by using simple convenience sampling.

Consistent with the power analysis results from previous studies (Mitchell et al., 2001) an a priori power analysis was conducted. A two-tail *t*-test (difference between two independent means) with the preset parameters of significance at .05 (Mitchell et al., 2001), power of .80 (Cohen, 1992), and a moderate effect size of 0.5 (Cohen, 1992) suggested a sample size of 170. The allocation ratio was set on 2 which calculated sample sizes for Group 1 as 127 and Group 2 as 43. Ten percent was added to this calculated sample size to make provision for participants who return incomplete surveys.

Out of the 283 participants who attempted to complete the survey, 135 participants were eligible. Ten of those participants were excluded because they did not complete the survey, resulting in a sample size of 125 (RNs = 101; HCAs = 24). Current demographic data from the

participating units indicate that 72% of the staff are RNs and 28% HCAs (Appendix A). The sample is a moderate representation of the RN: HCA average ratios of these two hospitals, with RNs 81% and HCAs 19%.

Inclusion and exclusion criteria. Twelve demograpic data screening questions (Appendix B) were implemented to ensure that only eligible participants complete surveys (*n* =125). Inclusion criteria were: (a) RNs and HCAs who are employed by the organization on one of the medical-surgical units are eligible to participate, (b) employed for at least six months, (c) work at least 20 or more hours per week, and (d) read, write and speak English. HCAs who worked dual duty as unit secretaries were also included. Agency nurses, LPNs, RNs and HCAs who work on other units, RNs who do dual duty as supervisors, RNs working as managers or nurse coordinators, RNs returning from FMLA within the last six months and nursing students were excluded.

Recruitment of RNs and HCAs. Following IRB approval for both hospitals, and from The University of Texas at Tyler (UT Tyler), unit managers were informed about the study. After gaining their permission, recruitment sessions that lasted about 10 minutes were offered by the primary researcher to RNs and HCAs on the respective units. These sessions were offered for one week, during the day, evening, night, and weekends to accommodate all shifts. Flyers (Appendix C) with details about the study and an invitation to participate were posted on these units. The inclusion and exclusion criteria were summarized and presented as a screening tool during the education sessions to explain eligibility to participate (Appendix B). These education sessions were followed up with reminder emails to eligible participants; one email per week, for six weeks.

Protection of human subjects. Once Institutional Review Board (IRB) approval was obtained from The University of Texas at Tyler IRB and from Aspire, the IRB contracted by the hospitals, sample recruitment was conducted. Potential participants were informed that their identifications on the survey would not be known. Methods to keep information secure, such as a secure electronic database with a coding system and encryption, saving the information on a locked flash drive, password protection on the researcher's computer and secure storage of any paperwork were discussed. Only the primary researcher had access to this information. The computer was locked in a safety box when not in use by the researcher. Results were reported as grouped data with no identifiers or units being reported individually.

A waiver of signed written informed consent was approved from the IRBs of both institutions because this study carried minimal risk (Health & Human Services, 2009). The instructions of the survey included the purpose and voluntary nature of the study and that participants should not feel obligated to participate. Risks and benefits were made available to ensure that a well-informed decision could be made. Provision was made for question and answer opportunities and participants received contact information for the researcher and for the IRBs at both institutions.

Conceptual Definitions

JE. Mitchell and Lee (2001) based the JE Theory on the view that people have figures and perceptions that are immersed in their backgrounds and are difficult to separate from the person. These figures are linked to each other in various ways and integrated with the person's environment; a person might be loosely or strongly attached to these figures. These attachments can be few or many, weak or strong, close or distant, or organizational and/or community attachments. The various ways these attachments exist create a 'stuckness' that keep the person

from leaving. Therefore, the core principle of JE states that two people can have the same level of embeddedness, but the attachments can differ considerably. JE can thus be defined as the total forces that keep a person in a job and consisting of various attachments with varying degrees of 'stuckness.' This means that the more embedded the employee is, the more likely this employee will be to stay.

The conceptual definition of *link* is the degree to which people are involved with other people or to activities (Lee et al., 2004). *Fit* is defined as "the degree to which their jobs and communities are comparable to the other interests in their lives (Lee et al., 2004). *Sacrifice* can be defined as the benefits that they would have to give up if they left their current settings (Lee et al., 2004).

Job satisfaction. Job satisfaction is conceptually defined as the degree to which an employee likes or dislikes the job (Chung et al., 2010). Job satisfaction has furthermore been described by Lerner et al. (2011) as a complex phenomenon which is affected by extrinsic factors such as promotion, supervision, influence, work-related attitude, education, age, gender and salary. The five most significant intrinsic factors that affect job satisfaction are self-fulfillment, service to others, team membership, environment and communication.

Intent to stay. Intent to stay can be defined as the perception that an employee has about the likelihood to stay in the current job (McCloskey & McCain, 1987). Ellenbecker (2004) demonstrated that job satisfaction is the strongest predictor of intent to stay. Wang, Tao, Ellenbecker and Liu (2012) showed that it is vital to improve nurse's job satisfaction and commitment to enhance intent to stay.

Generations. Generations are defined as a group of people who were born in the same geographical area, share the same birth years and ages, and who were exposed to the same

significant life events during critical developmental stages (Kupperschmidt, 2000). Three generational groups will participate in this study: Baby Boomers (1946-1964), Gen Xers (1965-1981) and Millennials (1982-1999) as described by the Pew Research Center (2010).

Operational Definitions

JE. The dimensions of JE are *links*, *fit*, and *sacrifice*, and each was measured as an organizational and community item. While organizational and community subscales can be calculated from the JE Scale, only the total score of all subscales and the individual scores of the six subscales of organizational and community were used for analysis.

Organizational *links* were reflected by measuring the importance of time in present position at the company and in the hospital industry, and also as an exploration of coworker interaction, team work and committees. Organizational *fit* included an evaluation of coworkers, match between job and skills, fit with the organizational culture, and a reflection on authority, responsibility, values, professional goals, growth and development. Organizational sacrifices were reflected with an exploration of the importance with the freedom to pursue goals, promotions, compensation, healthcare benefits and retirement benefits (Mitchell et al., 2001).

Community *links* were measured by evaluating the importance of personal links such as marital status, home ownership, family roots, and close family and friends. *Fit* to the community was measured by evaluating their satisfaction with the area where they live, local weather, leisure activities, and comfort with their surrounding community. Community *sacrifice* included a perception of what will be forfeited when the person has to move away from the community, such as loss of friends and family support and giving up the benefits of a safe neighborhood.

Job satisfaction. Job satisfaction was measured from on-the-job perspectives by evaluating the employee's overall satisfaction with the current position and likelihood to

recommend the employment setting to someone else. The level of satisfaction was also evaluated with a question about the person's perception of job fit *(will you choose this position again, knowing what you know now?).* A final question measured the person's satisfaction with compensation compared to degree of responsibilities. The Nurse Job Satisfaction Index (JSI) was utilized to measure job satisfaction (Wieck, Dols & Northam, 2009).

Intent to stay. Intent to stay (ITS) was measured with one question about the expected timeframe that the employee plans on staying with the employer. The Intent to Stay Instrument was utilized to measure this outcome (Wieck et al., 2009).

Generations. The differences in total JE, organizational JE subscales, community JE subscales, job satisfaction and intent to stay were measured between three generations: Baby Boomers, Gen Xers, and Millennials. Baby Boomers were born between 1946 and 1964, Gen Xers between 1965 and 1981, and Millennials between 1982 and 1999 as described by the Pew Research Center (2010).

Research Questions and Instruments

Research Questions

The lack of studies about the JE of HCAs in acute care facilities, the relationship issues that are caused by shared job responsibilities between RNs and HCAs, and the need to retain strong RNs and HCAs accentuated the need to investigate the differences between the JE, job satisfaction and intent to stay of HCAs and RNs. Further, the presence of three distinct age groups in the work setting reflected a need to understand differences between generations in acute care settings. The Adapted JE Model (Figure 2) was utilized to frame the following questions:

RQ1: Is there a difference between RNs and HCAs on total JE, organizational JE subscales, community JE subscales, job satisfaction and intent to stay?

RQ2: Is there a difference between three generations of health workers in an acute care hospital on total JE, organizational JE subscales, community JE subscales, job satisfaction and intent to stay?

RQ3: Can age, years worked, shift worked, level of education and community and organizational fit, link, and sacrifice subscales predict job satisfaction?

Instruments

The JE Instrument. The JE Instrument (Appendix D) was developed by Mitchell and Lee (2001). Permission to use the instrument was obtained from Dr. Lee (Appendix E). Total JE is a six dimensional construct of JE within the organization and community with three subscales each. The organizational dimension measures how tightly person is linked to the organization, how well the person fits to the organizational culture and the perceived sacrifices that the person will have to make if he or she quits the job. The community dimension measures how well the person is linked to the community, how well the person fits into the community culture and perceived community sacrifices if he or she quits the job. The number of items within each subscale ranged from 3 to 10.

Alpha reliabilities to obtain evidence of internal consistency between items of each subscale and the dimensions were calculated and reported by Mitchell et al. (2001). Forty items were measured with the JE Instrument on a 5-point Likert scale (1 = Strongly Disagree and 5 = Strongly Agree), fill-in-the-blank options, and Yes/No answers. Cronbach's alpha coefficients for overall JE of hospital workers were averaged and reported as $\alpha = .87$. JE was positively and significantly correlated to commitment ($r's = .54$, $p < .01$) and job satisfaction ($r's = .57$, $p <$

.01). The averaged Cronbach's alpha coefficients for organizational JE was α = 0.82 and, for community JE was α = 0.84.

Mitchell et al. (2001) measured links with fill-in-the-blank options on organizational level (7 items; α = .62) and with fill-in-the-blank options and Yes/No answers on community level (6 items; α = .50). Fit was measured with 5-point Likert scale items on organizational level (9 items; α = .86) and community level (5 items; α = .79). Sacrifice is measured with 5-point Likert scale items on organizational level (10 items; α = .82) and community level (3 items; α = .59).

The six community links subscale items included three categorical level and three continuous level data. Consistent with the Mitchell et al. (2001) study, all of the community links items were standardized to z-scores and averaged to compute a mean community links score. Organizational links, fit and sacrifice scores were averaged to compute mean subscale scores. Likewise, community fit and sacrifice scores were averaged to compute mean subscale scores. These means were standardized to z-sores to compute organizational JE, community JE and total JE scores.

Results for averaged Cronbach's alpha coefficients in this study differ slightly from those in the literature. In this study, the overall 40-item JE for RNs and HCAs was α = .74, for the 26-item organizational JE, it was α = .73 and for the 14-item community JE, it was α = .80. Subscale results were: Organizational links (7 items): α = .72, community links (6 items): α = .47, organizational fit (5 items): α = .86, community fit (9 items): α = .89, organizational sacrifice (10 items): α = .90, and community sacrifice (3 items): α = .64.

Community links - question 5 *(How many family members live nearby?)* and community links - question 6 *(How many of your close friends live nearby?)* were reported by many

participants in words and sentences, rather than numerical values. In an attempt to quantify the results, all of the data were categorized into five levels, each containing about 20% of the responses. These responses were assigned a 5-point Likert scale that ranged from none or unsure (score of 1) to 20 or more (score of 5).

To address the large quantity of missing values on community links- question 2 *(If you are married, does your spouse work outside the home?)* the corresponding responses were recoded. Community links- question 2 was a follow-up question of community links – question 1 *(Are you currently married?)* and thus has been legitimately skipped by participants who were not married, which was recorded as absent (i.e., missing) in the data set. To distinguish this absence from the true missing, the non-responses on community links- question 2 for those who selected *"Not married"* on community links- question 1 were recoded into 2 and labeled N/A with 0 = *No* and 1 = *Yes*. Multiple imputation was used for six additional 'true' missing values.

The Nurse Job Satisfaction Index. The Nurse Job Satisfaction Index (Appendix F) was developed by Wieck et al. (2009) and contained four questions, three questions with 4-point Likert scale items and one question with a 5-point Likert scale item. Wieck et al. (2009) reported the summed scores range from 4 – 17 (M = 11.97, SD = 2.8) and the alpha reliability was 0.854, with higher job satisfaction indicated by a higher score. Permission to use the instrument was obtained from Dr. Wieck (Appendix G). The summed scores for the current study ranged from 4 – 17 (M = 13.07, SD = 2.7) and the alpha reliability was 0.81.

The Intent to Stay Instrument. The Intent to Stay Instrument (ITS) (Appendix H) was also developed by Wieck et al. (2009) and contains one single item to indicate expected turnover. A fill-in-the blank option was provided to record the nurse's self-report of the number of years

that they intend to stay with their current employer. Wieck et al. (2009) reported responses that ranged from 0 – 40 years (M =9.98, SD = 8.0).

Responses on the current study came back in various forms including about 30 responses with comments such as: "I don't know, time will tell, until retirement, until my studies are completed, N/A, none" and about 25 participants indicated ranges that differed from 1-2 years, 3-5 years, and 11-14 years. To address this, all the responses were categorized into five levels, each containing about 20% of the responses. These responses were assigned a 5-point Likert scale (1 = *0-1, do not know, unsure, none, time will tell,* to 5 = *15+, indefinitely, retirement, 20, 30*). Responses in this current study (*M* = 2.9, *SD* = 1.394) are reported differently from those of the instrument because the responses were recoded as Likert scale levels. Likert scale level three represents answers that differ between three to five years. Numerical responses varied from 0 – 30 years.

Data Analysis

Qualtrics online software was used to conduct the survey. Data was downloaded and analyzed with IBM SPSS Statistics version 20.0. Descriptive analysis was conducted first to obtain characteristic and demographic information of participants. Internal consistency coefficients were then computed to evaluate the reliability of the instruments followed up by corresponding assumption tests before statistical tests were performed to answer the research questions.

Assumption testing. Histograms of all the variables were visually inspected for normal distribution, while evidence for normal distribution was calculated on each variable with kurtosis and skewness scores. Six variables violated the assumption of normality; organization links, organization fit, organization sacrifice, community fit, JSI and ITS. Furthermore, boxplots were

inspected for outliers; five multivariate outliers from the organizational subscales and JSI were identified and removed from this analysis. Normality was again examined for all of the dependent variables including histograms, boxplots and descriptive tests. Out of the 11 variables, normality were assumed for eight variables, but not for organization links, JSI and ITS. Log10 transformation was then applied, after which normality was assumed for all the variables.

T-tests were then performed to compare the means between RNs and HCAs, followed by ANOVA to investigate the differences between the generations on JE dimensions, job satisfaction and intent to stay. Finally, multiple regression analysis was conducted on the hypotheses dealing with demographics to investigate the relationships between job satisfaction and age, years worked, shift worked, level of education and organizational JE subscales.

Results

Demographic questions were proposed as open-ended options (Appendix I). Participants from Hospital 1 (n = 102) included RNs (n = 87) and HCAs (n = 15) and from Hospital 2 (n = 23) RNs (n = 14) and HCAs (n = 9). Most participants were full time employed RNs (n = 89) and HCAs (n = 22), while a smaller percentage were part time employed RNs (n = 12) and HCAs (n = 2). One HCA reported working as a HCA as well as a secretary. Time in the current position was almost similar between the two populations: the average time for RNs was 3.57 years (SD = .743) and the average time for HCAs was 3.25 years (SD = .847). However, a difference between the populations was detected in the years employed at these two facilities. The results varied from an average of 6.60 years (SD = 7.58) for RNs and 3.71 years (SD = 4.70) for HCAs. This difference indicates that while RNs are staying at their facilities, they make changes between departments, more often than HCAs. Most participants worked the 7a – 7p (n

= 69) and the 7p – 7a (*n* = 46) shifts. The remaining 10 participants worked the 7a – 3p, 3p – 11p, or 11p – 7a shifts. Ninety two percent of the staff worked 40 hours or less per week; the other 8% worked up to 72 hours per week. More specifically, even the hours worked per week were very similar between the two populations with an average of 37.04 hours (*SD* = 5.54) for RNs and an average of 39.38 hours (*SD* = 10.214) for HCAs. Only 8 out of the 24 participating HCAs were certified. RN education levels varied from Associate degree 35.2% (*n* = 44), BSN 46.4% (*n* = 58) and MSN 1.6% (*n* = 2).

Table 1. *Demographical Information*

		RNs		*HCAs*	
		Frequency	*Percentage*	*Frequency*	*Percentage*
Hospital 1		87	86%	15	63%
Hospital 2		14	14%	9	37%
Job Status	*Full Time*	89	88%	22	92%
	Part Time	12	12%	2	8%
Responsibilities	*Staff Nurse*	101	100%		
	HCA Only			23	96%
	HCA & Secretary			1	4%
Shift Worked	*7a – 7p*	56	55%	13	54%
	7p – 7a	37	37%	9	38%
	7a – 3p	2	2%	1	4%
	3p – 11p	4	4%	1	4%
	11p – 7a	2	2%	0	0%
Education Level	*High School Dipl.*	0	0%	4	17%
	Some College	1	1%	8	33%
	Certification	2	2%	6	25%
	Associate Degree	38	38%	6	25%
	BSN	58	57%	0	0%

Table 1. *Demographical Information (Continue)*

	RNs		*HCAs*	
MSN	2	2%	0	0%
Ph.D. & DNP	0	0%	0	0%
	Mean	*Std. Dev.*	*Mean*	*Std. Dev.*
Extra hours in other units	7	7%	10	42%
Time in Position	3.57	.743	3.25	.847
Years Worked at this facility	6.60	7.576	3.71	4.695
Hours per Week	37.04	5.535	39.38	10.214
Age	37.69	10.978	34.92	11.221

Ages ranged from 21 – 65 years (*M* = 37.16, *SD* 11.03). The reported ages were considered the participants' ages for 2014 because the survey was conducted in December 2014 and January 2015. Ages were categorized by generations as described by the Pew Research Center (2010) as follow: Baby boomers (1946-1964) now 50 to 68 years old (*n* = 21), Gen Xers (1965-1981) now 33 to 49 years old (*n* = 51), and Millennials (1982-1999) now 15 to 32 years old (*n* = 53) (Table 2).

Table 2. *Generations*

	Baby Boomers (1946-1964)		Gen Xers (1965-1981)		Millennials (1982-1999)	
	Total	Percentage	Total	Percentage	Total	Percentage
RNs	17	17%	41	41%	43	43%
HCAs	4	16%	10	42%	10	42%

Table 3. *Descriptive Statistics for Dependent Variables*

Group Statistics					
	Job Role	N	Mean	Std. Deviation	Std. Error Mean
Links organization	RN	97	.48	.33	.03
	HCA	23	.38	.35	.07
Fit organization	RN	97	4.18	.54	.055
	HCA	23	4.12	.63	.13
Sacrifice organization	RN	97	3.63	.70	.07
	HCA	23	3.83	.67	.14
Links community	RN	97	.028	.43	.04
	HCA	23	-.11	.49	.10
Fit community	RN	97	4.00	.73710	.07484
	HCA	23	3.84	.70234	.14645
Sacrifice community	RN	97	3.74	.72365	.07348
	HCA	23	3.33	.73855	.15400
Total JE	RN	97	.053	.53037	.05385
	HCA	23	-.10	.54940	.11456
Job Satisfaction Index	RN	97	.26	.14162	.01438
	HCA	23	.38	.14764	.03078
Intent to Stay	RN	97	.39	.23409	.02377
	HCA	23	.46	.26845	.05597

RQ1: *Is there a difference between RNs and HCAs on total JE, organizational JE subscales, community JE subscales, job satisfaction and intent to stay?*

Independent-sample *t*-tests were conducted to answer the question. The only statistically significant finding showed was that RNs valued community sacrifices as more important than HCAs [t (118) = 2.41, p = .018 with a large effect size of d = .55] (Table 4). A post hoc power analyses revealed a power of .50, thus a 50% probability that rejecting the null hypothesis is wrong. Post hoc analyses on the non-significant t-tests vary between .48 and .65. Post hoc power analyses below .80 might be an indication of Type II errors.

Organizational links, organizational fit and community fit subscale scores of RNs were somewhat higher than those of HCAs (Table 3) but with no statistical significant differences. HCAs demonstrated a slightly higher level of total JE, job satisfaction and intent to stay than RNs. They are slightly better linked to their communities and place greater value on organizational sacrifices than RNs (Table 3).

Table 4. *Independent Samples Test*

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Links organization	Equal variances assumed	.606	.438	1.393	118	.166	.10623	.07627	-.04480	.25726
	Equal variances not assumed			1.315	31.240	.198	.10623	.08079	-.05850	.27096
Fit organization	Equal variances assumed	.386	.536	.522	118	.603	.06733	.12896	-.18803	.32270
	Equal variances not assumed			.473	30.054	.639	.06733	.14223	-.22312	.35778
Sacrifice organization	Equal variances assumed	.010	.923	-1.214	118	.227	-.19516	.16070	-.51338	.12306
	Equal variances not assumed			-1.242	34.122	.223	-.19516	.15718	-.51455	.12423

Table *4. Independent Samples Test (Continue)*

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Links community	Equal variances assumed	1.021	.314	1.358	118	.177	.13870	.10217	-.06362	.34102
	Equal variances not assumed			1.245	30.381	.223	.13870	.11138	-.08865	.36605
Fit community	Equal variances assumed	.072	.789	.951	118	.344	.16109	.16948	-.17451	.49670
	Equal variances not assumed			.980	34.453	.334	.16109	.16446	-.17297	.49516
Sacrifice community	Equal variances assumed	.548	.461	2.407	118	.018	.40550	.16848	.07186	.73913
	Equal variances not assumed			2.376	32.767	.023	.40550	.17063	.05826	.75274
Total JE	Equal variances assumed	.253	.616	1.306	118	.194	.16170	.12384	-.08354	.40693
	Equal variances not assumed			1.277	32.434	.211	.16170	.12658	-.09601	.41941

Table *4. Independent Samples Test (Continue)*

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Job Satisfaction Index	Equal variances assumed	.016	.901	-1.330	118	.186	-.04402	.03311	-.10959	.02154
	Equal variances not assumed			-1.296	32.295	.204	-.04402	.03398	-.11321	.02516
Intent to Stay	Equal variances assumed	.271	.604	-1.180	118	.240	-.06594	.05586	-.17656	.04468
	Equal variances not assumed			-1.084	30.422	.287	-.06594	.06081	-.19006	.05818

RQ2: Is there a difference between three generations of health workers in an acute care hospital on total JE, organizational JE subscales, community JE subscales, job satisfaction and intent to stay?

ANOVA was conducted to answer this question. Participants were classified into three generational groups: Millennials (n = 48), Gen Xers (n = 51) and Baby Boomers (n = 21). Results showed a statistically significant difference [F (2, 117) = 4.813, p = .01] in the total JE scores (Table 5). A post hoc analysis revealed a medium effect size of .30 and a power of 0.60, a probability of 40% that a Type II error could have been made. Tukey-Kramer post hoc analysis

revealed that the increase from Millennials to Baby Boomers [-.42, 95% CI (-.74 to -.10)] was statistically significant (p = .007) (Table 6).

The organizational links embeddedness score was statistically different between the three groups [$F(2, 117) = 26.27$, $p < .01$] (Table 5) with a large effect size of 0.70. The null hypothesis is rejected: There are significant differences in JE scores for organizational links between generational groups. The post hoc power of 0.999 fully supported the decision since a Type II error rate was smaller than 0.001. Tukey-Kramer post hoc analysis revealed that the increase in organizational links scores from Millennials to Gen Xers [-.16, 95% CI (-.29 to -.03)] was statistically significant (p = .011); the increase from Millennials to Baby Boomers [-.52, 95% CI (-.70 to -.35)] was statistically significant ($p < .01$) and the increase from Gen Xers to Baby Boomers [-.36, 95% CI (-.53 to -.19)] was statistically significant ($p < .01$) (Table 6).

No significant differences between the three generations were found for organizational fit, organizational sacrifice, community links, community fit, and community sacrifice or for JSI and ITS.

Table 5. *ANOVA*

		Sum of Squares	*df*	*Mean Square*	*F*	*Sig.*
Links organization	Between Groups	4.02	2	2.01	26.27	.00
	Within Groups	8.95	117	.08		
	Total	12.97	119			
Fit organization	Between Groups	.29	2	.15	.47	.63
	Within Groups	36.28	117	.31		
	Total	36.57	119			
Sacrifice organization	Between Groups	1.08	2	.54	1.12	.33
	Within Groups	56.28	117	.48		
	Total	57.36	119			
Links community	Between Groups	.36	2	.18	.91	.40
	Within Groups	22.90	117	.20		
	Total	23.26	119			
Fit community	Between Groups	.40	2	.20	.37	.69
	Within Groups	63.10	117	.54		
	Total	63.49	119			
Sacrifice community	Between Groups	.81	2	.40	.73	.48
	Within Groups	64.52	117	.55		
	Total	65.33	119			
Total JE	Between Groups	2.60	2	1.30	4.81	.01
	Within Groups	31.54	117	.27		
	Total	34.13	119			
Job Satisfaction Index	Between Groups	.05	2	.02	1.17	.31
	Within Groups	2.39	117	.02		
	Total	2.44	119			
Intent to Stay	Between Groups	.16	2	.08	1.37	.26
	Within Groups	6.77	117	.06		
	Total	6.93	119			

Table 6. *Post Hoc Tukey HSD*

Multiple Comparisons								
Dependent Variable		(I) Generations	(J) Generations	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Links Organ. JE	Tukey HSD	Millenials	Gen Xers	-.16265*	.05562	.011	-.2947	-.0306
			Baby Boomers	-.52449*	.07237	.000	-.6963	-.3527
		Gen Xers	Millenials	.16265*	.05562	.011	.0306	.2947
			Baby Boomers	-.36184*	.07172	.000	-.5321	-.1916
		Baby Boomers	Millenials	.52449*	.07237	.000	.3527	.6963
			Gen Xers	.36184*	.07172	.000	.1916	.5321
Fit Organ. JE	Tukey HSD	Millenials	Gen Xers	-.06046	.11198	.852	-.3263	.2054
			Baby Boomers	-.13889	.14568	.608	-.4847	.2069
		Gen Xers	Millenials	.06046	.11198	.852	-.2054	.3263
			Baby Boomers	-.07843	.14437	.850	-.4212	.2643
		Baby Boomers	Millenials	.13889	.14568	.608	-.2069	.4847
			Gen Xers	.07843	.14437	.850	-.2643	.4212
Sacrifice Organ. JE	Tukey HSD	Millenials	Gen Xers	.12537	.13947	.642	-.2057	.4565
			Baby Boomers	-.13542	.18146	.736	-.5662	.2953
		Gen Xers	Millenials	-.12537	.13947	.642	-.4565	.2057
			Baby Boomers	-.26078	.17982	.319	-.6877	.1661
		Baby Boomers	Millenials	.13542	.18146	.736	-.2953	.5662
			Gen Xers	.26078	.17982	.319	-.1661	.6877
Links Comm. JE	Tukey HSD	Millenials	Gen Xers	-.11536	.08897	.400	-.3266	.0958
			Baby Boomers	-.09969	.11575	.666	-.3745	.1751
		Gen Xers	Millenials	.11536	.08897	.400	-.0958	.3266
			Baby Boomers	.01567	.11471	.990	-.2566	.2880
		Baby Boomers	Millenials	.09969	.11575	.666	-.1751	.3745
			Gen Xers	-.01567	.11471	.990	-.2880	.2566
Fit Comm. JE	Tukey HSD	Millenials	Gen Xers	-.07770	.14768	.859	-.4283	.2729
			Baby Boomers	.07917	.19214	.911	-.3769	.5353
		Gen Xers	Millenials	.07770	.14768	.859	-.2729	.4283
			Baby Boomers	.15686	.19041	.689	-.2951	.6089
		Baby Boomers	Millenials	-.07917	.19214	.911	-.5353	.3769
			Gen Xers	-.15686	.19041	.689	-.6089	.2951
			Gen Xers	-.15686	.16782	.622	-.5649	.2512

Table 6. *Post Hoc Tukey HSD (Continue)*

Multiple Comparisons								
Dependent Variable		(I) Generations	(J) Generations	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Sacrifice Comm. JE	Tukey HSD	Millenials	Gen Xers	-.06985	.14934	.887	-.4244	.2847
			Baby Boomers	-.23512	.19429	.450	-.6964	.2261
		Gen Xers	Millenials	.06985	.14934	.887	-.2847	.4244
			Baby Boomers	-.16527	.19255	.668	-.6224	.2918
		Baby Boomers	Millenials	.23512	.19429	.450	-.2261	.6964
			Gen Xers	.16527	.19255	.668	-.2918	.6224
Total JE	Tukey HSD	Millenials	Gen Xers	-.10736	.10441	.561	-.3552	.1405
			Baby Boomers	-.42044*	.13583	.007	-.7429	-.0980
		Gen Xers	Millenials	.10736	.10441	.561	-.1405	.3552
			Baby Boomers	-.31308	.13461	.056	-.6326	.0065
		Baby Boomers	Millenials	.42044*	.13583	.007	.0980	.7429
			Gen Xers	.31308	.13461	.056	-.0065	.6326
Job satisf. index	Tukey HSD	Millenials	Gen Xers	-.00461	.02876	.986	-.0729	.0637
			Baby Boomers	.04987	.03742	.380	-.0390	.1387
		Gen Xers	Millenials	.00461	.02876	.986	-.0637	.0729
			Baby Boomers	.05448	.03708	.309	-.0335	.1425
		Baby Boomers	Millenials	-.04987	.03742	.380	-.1387	.0390
			Gen Xers	-.05448	.03708	.309	-.1425	.0335
Intent to stay	Tukey HSD	Millenials	Gen Xers	-.07626	.04837	.260	-.1911	.0386
			Baby Boomers	-.06840	.06293	.524	-.2178	.0810
		Gen Xers	Millenials	.07626	.04837	.260	-.0386	.1911
			Baby Boomers	.00786	.06236	.991	-.1402	.1559
		Baby Boomers	Millenials	.06840	.06293	.524	-.0810	.2178
			Gen Xers	-.00786	.06236	.991	-.1559	.1402

*. The mean difference is significant at the 0.05 level.

RQ3: *Can age, years worked, shift worked, level of education and organizational links, organizational fit, and organizational sacrifice subscales predict job satisfaction?*

A multiple regression was run to predict job satisfaction from age, years worked, shift worked, level of education, organizational links, organizational fit, and organizational sacrifice.

The Pearson Correlation table suggested potential multicollinearity among some of the variables (organizational fit, organizational sacrifice, JSI and years worked) with correlations slightly greater than .70. However, the TOLERANCE and VIF results indicated absence of collinearity. No correlations greater than .80 were noted. The Casewise Diagnostics table suggested two outliers: Cases 120 and 122. After these two cases were removed, the assumptions of linearity, independence of errors, homoscedasticity, unusual points and normality of residuals were met. Independence of residuals was assessed by a Durbin-Watson statistic of 1.94. Normal distribution was verified with visual inspection of the histogram and P-P Plot. Model fit was confirmed with Adjusted R^2 = .678. The ANOVA table suggested a statistically and significantly prediction of job satisfaction F (7, 115) = 37.652, p < .0005. Organizational fit, organizational sacrifice and level of education added statistical significance to the prediction, p < .05. The regression coefficients and standard errors can be found in Table 8. The post hoc analysis suggested an effect size of 2.11 and a power of 1.00; thus fully supported the decision to reject the null hypothesis since a Type II error rate was smaller than 0.00.

Table 7. *Generational Descriptive Data.*

		N	Mean	Std. Deviation
Links organization	Millennials; 15-32	48	.30	.21
	Gen Xers; 33-49	51	.47	.30
	Baby Boomers; 50-68	21	.83	.35
	Total	120	.46	.33
Fir organization	Millennials; 15-32	48	4.12	.61
	Gen Xers; 33-49	51	4.18	.54
	Baby Boomers; 50-68	21	4.26	.49
	Total	120	4.17	.55
Sacrifice organization	Millennials; 15-32	48	3.70	.73
	Gen Xers; 33-49	51	3.57	.69
	Baby Boomers; 50-68	21	3.83	.59
	Total	120	3.67	.69
Links community	Millennials; 15-32	48	-.07	.46
	Gen Xers; 33-49	51	.05	.44
	Baby Boomers; 50-68	21	.03	.42
	Total	120	.00	.44
Fit community	Millennials; 15-32	48	3.95	.81
	Gen Xers; 33-49	51	4.02	.69
	Baby Boomers; 50-68	21	3.87	.63
	Total	120	3.97	.73
Sacrifice community	Millennials; 15-32	48	3.59	.78
	Gen Xers; 33-49	51	3.66	.74
	Baby Boomers; 50-68	21	3.83	.65
	Total	120	3.66	.74
Total JE	Millennials; 15-32	48	-.10	.58
	Gen Xers; 33-49	51	.01	.47
	Baby Boomers; 50-68	21	.32	.48
	Total	120	.02	.54
Job satisfaction index	Millennials; 15-32	48	.28	.15
	Gen Xers; 33-49	51	.28	.14
	Baby Boomers; 50-68	21	.23	.14
	Total	120	.27	.14
Intent to stay	Millennials; 15-32	48	.36	.24
	Gen Xers; 33-49	51	.44	.24
	Baby Boomers; 50-68	21	.43	.22
	Total	120	.41	.24

Table 8. *Summary of Multiple Regression Analysis*

Variable				*95% Confidence Interval for B*	
	B	SE_B	*ß*	*Lower Bound*	*Upper Bound*
Intercept	1.15	.07		1.01	1.30
Age	-.00	.00	-.05	-.00	.00
Shift Worked	-.01	.01	-.05	-.03	.01
Years Worked	.00	.00	.03	-.00	.01
Education Level	-.02	.01	-.11*	-.03	-.00
JE Org. Links	-.01	.04	-.03	-.09	.07
JE Org. Fit	-.08	.02	-.30*	-.11	-.04
JE Org. Sacrifice	-.12	.02	-.58*	-.15	-.09

*Note. * $p < .05$; B = unstandardized regression coefficient; SE_B = standard error of the coefficient; ß =standardized coefficient*

Table 9. *Multiple Regression Correlations*

Correlations									
		Job Satisfaction	Age	Shift worked	Years worked	Level of education	LO JE	FO JE	SO JE
Pearson Correlation	Job Satisfaction	1.000	-.121	-.012	-.152	-.087	-.232	-.715	-.791
	Age	-.121	1.000	.165	.654	-.015	.604	.088	.053
	Shift worked	-.012	.165	1.000	.363	.094	.122	-.128	-.029
	Years worked	-.152	.654	.363	1.000	.076	.798	.073	.115
	Level of education	-.087	-.015	.094	.076	1.000	.053	.037	-.071
	LO JE	-.232	.604	.122	.798	.053	1.000	.144	.226
	FO JE	-.715	.088	-.128	.073	.037	.144	1.000	.703
	SO JE	-.791	.053	-.029	.115	-.071	.226	.703	1.000

Discussion

This study examined relationships among JE, job satisfaction and intent to stay between RNs and HCAs, and three generations of these populations. Differences between RN and HCA demographical data were also investigated.

Differences between RNs and HCAs

Organizational JE. Organizational links, organizational fit and community fit subscale scores of RNs were somewhat higher than those of HCAs. This outcome may be explained as in previous studies (Bosley & Dale, 2008; Spilbury & Meyer, 2005; Thornley, 2000), who found that heavy demands and lack of training and autonomy impact job satisfaction, leaving HCAs feeling devalued, non-used and misused. These negative feelings might be connected to how weak they link to, and fit into the organization, compared to RNs. RN and HCA relationships depend of the levels of trust between the individuals, placing RNs in a position to decide which responsibilities can be designated to the HCAs. This superior hierarchy might contribute to the higher organizational links and fit scores among RNs.

Community JE. RNs valued community sacrifices as significantly more important than HCAs. The concept of community sacrifices was conceptualized to be costs and inconvenience associated with relocating to get another job. Due to the differences in pay between RNs and HCAs (Natan & Becker, 2010; Rosen et al., 2011), it is not surprising that the community sacrifice might be perceived differently by the higher-paid employees. One explanation could be the financial ability of RNs to invest in their communities, while HCAs might not financially able to pay for the same investments. This might also explain the finding that RNs fit slightly better to their communities than HCAs.

Total JE, job satisfaction and intent to stay. Total JE, job satisfaction, intent to stay, community links and organizational sacrifices scores of HCAs were slightly higher than those of RNs. The positive correlation between HCA scores on both job satisfaction and organizational sacrifices are similar to the Mitchell et al. (2001) result and confirmed the reliability of the instrument. The correlation between organizational sacrifice and job satisfaction is also supported by Rosen et al. (2011) who showed a positive correlation between job dissatisfaction, fewer benefits and higher turnover among HCAs. The outcome from the current study is also consistent with Natan and Becker (2010) who demonstrated that HCAs value extrinsic motivators such as benefits more than RNs.

The non-significant differences in mean values between RNs and HCAs on all of the dependent variables (except community sacrifices) are so small that one has to consider a reason why this happened. The average age of the RNs was 37.69 (*SD* = 10.98) and the average age of the HCAs was 34.92 (*SD* = 11.22). The average time employed in the current position for RNs was 3.57 years (SD = .743) and for HCAs was 3.25 years (SD = .847). These similarities could have some bearing on why the scores were so similar because they have the same generational values and preferences.

Generational Differences in JE

ANOVA was run to test for differences between generations of nursing staff on total JE, organizational JE subscales, community JE subscales, job satisfaction and intent to stay. Three generations were included; Baby Boomers, Gen Xers and Millennials. Scores between the three generations are described as highest, lowest and moderate, where moderate refers to a score between highest and lowest.

Baby Boomers. Baby Boomers scored the highest on all three organizational subscales, links, fit and sacrifice, as well as on total JE (Table 7). This result fits one of the characteristics of Baby Boomers; motivated by money and self-gratification. They place value on their job environment and make sacrifices to fit and link well. They fit moderately into their communities and place moderate value on community sacrifices. Their job satisfaction scores were the lowest, with a moderate intent to stay score. This outcome is in contrast with the studies done by Young et al. (2013), and Wieck et al. (2010) who found that Baby Boomers are mostly more satisfied with their jobs than Gen Xers and Millennials. However, this result teaches us that higher levels of JE are no guarantee that these employees are satisfied with their jobs, consistent with the findings of Mitchell and Lee (2001). The moderate intent to stay scores might be a symptom of workers who are preparing to retire.

Gen Xers. Gen Xers scored the highest on community fit and link, job satisfaction and intent to stay. They were moderately embedded on the total JE, organizational link and fit subscales, while they placed the lowest values on organizational and community sacrifices (Table 7). Again, this outcome fits the characteristics of conservative family values, balance between work and leisure and independent, realistic actions. Because the JE theory is focused on reasons why employees stay in a job, it makes sense that programs to improve community fit and links will help to increase retention of these employees.

Millennials. Millennials scored the highest on community sacrifices, while placing moderate value on organizational sacrifices. Community fit and job satisfaction scores were moderate. Their organizational links and fit, community links, total JE and intent to stay scores were the lowest. A great portion of the current workforce is made up by this generation (Schullery, 2013) and researchers suggest that retention strategies should focus on this

generation's preferences to ensure a stable retention rate in the future. Community sacrifices and to a certain degree, organizational sacrifices are important for this generation. An example of incentives that relate to these JE subscales is what a hospital in rural Illinois did with great success: They offered down payment assistance for home purchases (Stroth, 2010).

Comparison among the generations. Differences among all three generations on the organizational link subscale were statistically significant, as well as the difference between Baby Boomers and Millennials on total JE. No previous studies to investigate generational JE differences of healthcare employees in acute care facilities could be located for comparison. Speculation for reasons why organizational links showed significant differences between the three generations should be based on the questions asked, instead of comparing to the characteristics of each generation. For example, three out of the seven questions included years employed at this organization, in this position and in the hospital industry. Baby Boomers will most likely score higher on these questions than Millennials, just because they are older. However, this does not explain the significant difference between these two generations and Gen Xers. Millennials are focused on instant results and strive to thrive in their jobs. They might be more involved in committees and work teams. The average ages for RN and HCA were the same in each generation, with results showing that the mean age for healthcare employees at these two facilities falls in the Gen Xer generation (Table 2). This finding shows that attempts for improvement should be focused on generational similarities for each population. These differences in JE between generations (although only organizational links embeddedness between all the generations, and total JE between Baby Boomers and Millennials were significant) showed that retention strategies and incentives should be focused on methods to retain staff. The differences between generations should be kept in mind because a 'one size fits

all' approach will not deliver positive results (Macky et al., 2008; Young, Sturts, Ross & Kim, 2013; Wieck et al., 2010).

Prediction of Job Satisfaction

Multiple regression analysis was conducted on the hypotheses dealing with demographics to investigate the prediction of job satisfaction from age, shifts worked, years worked, level of education, organizational links, organizational fit and organizational sacrifice. Organizational fit, organizational sacrifice and level of education significantly predicted job satisfaction. This outcome is partially confirmed with the results from the other two research questions. In *RQ1*, RNs who had a higher level of education and a better organizational fit embeddedness than HCAs, scored lower on job satisfaction. However, in *RQ2*, both HCAs and Gen Xers scored high on organizational sacrifice embeddedness and on job satisfaction levels; showing a positive, not negative, correlation. More research is suggested to investigate this conflict in outcome. This result is also partially consistent with Mitchell and Lee (2001) who showed that organizational fit is one of the predictors of job satisfaction.

Chan, Leong, Luk, Yeung and Van (2009) showed that younger nurses have less work experience, higher levels of education, and a higher likelihood to change jobs than older nurses, who seems to be more satisfied with their jobs and usually have a lower level of education. Although age, shifts worked, years worked and organizational links were not significant predictors of job satisfaction, one cannot ignore the fact that organizational fit and sacrifice, and level of education are significant predictors. Furthermore, this current study showed that these correlations are negative, thus as the levels of education, organizational fit and organizational sacrifice scores are increasing, job satisfaction decreases. This result can be explained with the differences between job satisfaction and JE in mind. Job satisfaction is job-related, while JE (in

this instance) is organization-related. The employee might fit well in the organizational culture and appreciates the incentives offered by the organization, improves his or her level of education and then feels trapped in a job that no longer offers challenges to meet the level of education. This scenario also explains while organizational links were not a significant predictor, because team and committee membership are usually related to a specific job.

'Time at this facility' is almost double the 'time in your current position' for RNs, an indication that the current RNs in this organization have the potential to stay at their jobs, but that the organization should explore the specific reasons why organizational sacrifices and job satisfaction scores are lower. HCA scores did not demonstrate a difference between these two variables.

Strengths and Limitations

Strengths

This study contributes to the existing knowledge base by addressing the scientific gap regarding JE in RNs and HCAs who work together. Only medical and surgical units were included in this study in order to facilitate homogeneity among the sample. Data was collected from two equally cultural hospitals belonging to one organization to provide a baseline for futuristic comparisons with other organizations and to ensure consistency. Generalizability was enhanced by correlating RN and HCA participant ratios to the averages of the participating units of these two hospitals. This correlation provides an opportunity to generalize this study beyond these two hospitals, but with an awareness of the limitations noted in the next section. New information from this study serves as a valuable resource to improve employee retention and potentially, job satisfaction and patient outcomes in acute care facilities. No previous studies could be located that explored the differences in JE dimensions and subscales between RNs and

HCAs. This gap in the literature provided valuable insight for retention strategies in both populations and an understanding about the influence that one population has on the other.

Limitations

Limitations to this study include non-response errors, such as RN and HCA eligible participants who did not participate. Some participants might not have answered the questions truthfully. Very unsatisfied or satisfied employees might have viewed this opportunity as a way to voice their opinions (Smith, n.d.). Using non-probability sampling over probability sampling introduces the threat of extraneous variables that are difficult to control (Portney & Watkins, 2009). The control of sample homogeneity (limit to only medical and surgical nurses) can limit the generalizability of the results to the nursing population in general.

The threat of history could have been a factor if they discussed it among themselves and may have caused someone to respond a bit differently. Cultural differences that were not addressed as a variable in this study, can affect an individual's perception toward the job. The sample size was smaller than anticipated and can limit the generalizability of the results as well as reduce statistical power.

The differences in measurement levels of the community links subscale and recoding of two of the questions in that subscale could have caused inaccurate results. Recoding of the intent to stay question could have changed the outcome on that variable as well. The first three questions of community links are biased because it does not make provision for other situations. The post hoc power analyses on the non-significant t-tests range between .48 and .65. This might be an indication of a Type II error. Future research should include larger sample sizes and equal distribution of the populations to reduce the threat for Type II errors.

Implications for Future Research

A focus on organizational links and community sacrifices will help to improve JE levels. Incentives for organizational links can be implemented with opportunities to serve on committees and be involved in decision making processes. Particularly HCAs can benefit from being engaged and having a voice within the organization. Community sacrifices can be supported with incentives such as down payment assistance for home buying and organizational community involvement.

Mitchell and Lee (2001) demonstrated that job satisfaction can be present without JE at a particular company. This happens because job satisfaction relates to job-related factors, while JE relates to organization-related and community-related factors. More studies are necessary to investigate how high levels of JE with low levels of job satisfaction will influence intent to stay. The significant differences in organizational links between generations and total JE between Baby Boomers and Millennials should be explored by investigating the answers to the individual questions to make a comparison between the generations.

Future researchers should consider refining the JE instrument. The first community links question *(Are you currently married?)* should be changed to provide more options. The second question *(If you are married, does your spouse work outside the home?)* should make provision for not applicable (for unmarried participants). The third question *(Do you own the home you live in?)* should provide more options.

Future studies should also investigate patient satisfaction with quality of care and job performance of RNs and HCAs as outcomes of organizational and community JE. This information will help to improve quality of care. An increased focus on the impact of generational differences on JE is necessary.

Internal locus of control (LOC) was positively correlated to self-efficacy, job satisfaction and intent to stay (Reid, 2012). Only one study could be located that confirmed a positive relationship between internal LOC and JE (Ng & Feldman, 2011). For the purpose of increased retention rates and hiring the right employee, the correlations between LOC, generations, level of education and intent to stay should be investigated.

Conclusion

Although HCAs are providing direct care for patients along with RNs, they are an understudied population in acute care facilities. JE measures the reasons why employees stay in a job, even if they are not satisfied with this job. These reasons might be organizational or community related. Generational differences between healthcare populations are linked to relationship and retention issues in nursing (Kupperschmidt, 2000; Macky, Gardner & Forsyth, 2008; Pew Research Center, 2010; Schullery, 2013; Wieck, Dols & Landrum, 2010; Young et al., 2013). This descriptive, comparative study examined the differences that exist between the JE, job satisfaction and intent to stay of RNs and HCA, and between generations.

Results from this research can help administrators understand organizational and community influences on JE and the effect that JE of RNs and HCAs has on professional relationships and quality of nursing care. These findings can also identify areas for hiring and relationship improvement incentives. Recommendations from previous studies in this context can be compared to these results and considered as strategies to improve workflow processes. Furthermore, this study provides a basis for future studies regarding the relationships between employee JE, quality of care indices, cost effectiveness and patient satisfaction.

Although not significant, the results from this study sketch a picture of RNs who fit well into the organizational culture and create the necessary professional links to be successful, while

they also fit well in their communities and place significant value on community sacrifices. However, they scored lower on total JE, job satisfaction and intent to stay than HCAs. RNs might be well embedded in their communities (such as being, married, children in school and owning a house) but might not be embedded well enough at their particular organization or department to remain in their jobs, and might explore opportunities at other organizations or departments more freely than HCAs. In addition to this study's results, attention to studies that showed positive results with regard to the organizational fit (Reitz, 2010) and community sacrifice subscales (Strath, 2010), can reduce annual turnover and improve retention strategies significantly.

Perceived values of HCAs to organizational sacrifices, community links and higher total JE scores, although not significantly, can be a revelation for organizations that are striving to increase employee retention rates. Attempts to incorporate HCAs into the organization, such as offering opportunities to participate in committees, offering standardized education, certifications and a new focus on the value that this workforce bring to quality of nursing care will help to improve their organizational JE.

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Chapter Four

Summary

The nursing profession continues to evolve and requires nurses to make critical decisions, delegate direct patient care responsibilities to health care assistants (HCAs), deliver exceptional quality of care, and stay abreast of new technology and education. Research studies have shown that RN and HCA work relationships are suffering, resulting in low job satisfaction and retention rates (Jenkins & Joyner, 2013; Spilbury & Meyer, 2005). Managers and hospital administrators are mandated by federal regulations to ensure optimal patient care while reducing operating costs (Health & Human Services, 2009).

Job embeddedness (JE) (Mitchell et al., 2001) is a relatively new theory that is gaining attention from nursing researchers. The Job Embeddedness Theory is a six dimensional construct to explore the reasons why employees remain in a job, even if they are dissatisfied with the job. Researchers explored the relationships between JE and locus of control (Ng & Feldman, 2011), engagement (Halbesleben & Wheeler, 2008), job satisfaction (Mitchell & Lee, 2001), commitment (Mitchell et al., 2001), job performance (Sekiguchi, Burton & Sablynski, 2008) and intent to stay (Reitz, 2014). JE studies related to the nursing profession have been conducted among long term healthcare facilities with only RN sample populations (Reitz, 2010; Reitz, 2014; Reitz & Anderson, 2011).

The purposes of this descriptive study were to investigate the differences in JE, job satisfaction and intent to stay between RNs and HCAs and between three generations of these populations in an acute care setting. Demographic data such as age, years worked, shifts worked, level of education, and organizational and community subscales of JE were used to measure prediction of job satisfaction. Results from this study might guide managers and

administrators in efforts to retain employees and adapt hiring strategies by improving the level of employee JE.

Results showed that there are significant differences between JE scores of RNs and HCAs in the community sacrifice subscale. Total JE scores between baby boomers and millennials were significantly different, while organizational links scores between all three generations showed a significant difference. Organizational fit, organizational sacrifice and level of education added significance to the prediction of job satisfaction.

Limitations to this study include cultural differences, the small, unequal sample size, and the need to recode the community links subscale. Generalizability was enhanced by limiting the sample population to two cultural equal hospitals, including only medical surgical units and correlating the RN : HCA ratios.

A replication of this study is strongly recommended, but should include efforts to eliminate the mentioned limitations. Future studies should involve more than two hospitals and all the RNs and HCAs employed by these hospitals should be allowed to participate. Record keeping of the participants' units will help to identify JE differences between nursing disciplines (i.e. operating room and labor and delivery) and will also provide a way to compare the same disciplines from various hospitals to each other. The variety of participants will ensure a wider cultural mix, which might evolve into more ideas for future research.

The JE instrument needs refining so that the links community subscale can be measured as Likert scale, equal to the other subscales. The specific questions in this subscale need to provide more options for diverse life circumstances.

JE has been linked to customer satisfaction in the hotel industry (Karatepe & Karadas, 2012). Future studies in nursing should include explorations of JE correlations with job

performance and patient satisfaction among RNs and HCAs in acute care facilities. Only one study could be located to investigate the correlations between JE and locus of control (Ng & Feldman, 2011). Internal locus of control has also been linked to self-efficacy, job satisfaction and intent to stay in nursing (Reid, 2012). Future research to investigate the correlations between JE of RNs and HCAs, locus of control, job satisfaction and intent to stay in acute care facilities will provide valuable insight to hiring and retention strategies.

In summary, this study provided evidence that JE scores between RNs and HCAs in acute care facilities differ. More research with larger sample sizes are necessary to explore reasons for these differences. Differences in generational JE scores were also identified and opened various options for researchers to find solutions to retentions strategies.

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Appendix A. Employee Demographic Data

Employees on Medical and Surgical Units on June 3rd, 2014

UNIT	**RNs**	**HCAs**	**TOTAL**
4NE	33	17	50
4SE	33	17	50
4ST	47	13	60
6ST	28	12	40
7ST	29	26	3
8ST	44	16	60
9ST	33	17	50
10ST	27	8	35
8 Units	**271**	**103**	**374**

Appendix B. Screening Tool

Screening Tool

SECTION A	**YES**	**NO**
Are you an MDMC employee only (not agency, not resource, not MMMC, MCMC, or MRMC)?		
Have you been employed for 6 months or longer?		
Are you an RN or HCA?		
Do you work at least 20 hours per week?		
Do you work in one of the following units: 4SE, 4NE, 4ST, 6ST, 7ST, 8ST, 9ST, 10ST?		

***NO** to any answer: You are **NOT eligible** to complete the survey*
YES to all** Section A answers: **Complete Section B

SECTION B
Do you work extra time in any other unit not mentioned above?
RNs: Do you also work as a Nursing Supervisor?
HCAs: Are you nursing student?
Are you employed in a leadership position, such as manager, supervisor, coordinator or director?
Did you return from FMLA less than 6 months ago?

***YES** to any answer: You are **NOT eligible** to complete the survey*
***NO to all** Section B answers: **Congratulations!** You are eligible to complete the survey*

Appendix C. Flyer

You are invited to participate in an Anonymous Workplace Survey.

Please take the time to share your views!

Participate in Nursing Research at MDMC and

Have a chance to win a $50 Gift Card!

Questions??

Contact the Primary Researcher who is a doctoral student at The University of Texas at Tyler

Zelda Gibbs, MSN, RN

Department of Education

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Appendix D. JE Instrument (Mitchell et al., 2001)

Fit to Community

1. I really love the place where I live.

2. The weather where I live is suitable for me.

3. This community is a good match for me.

4. I think of the community where I live as home.

5. The area where I live offers the leisure activities that I like.

Fit to Organization

1. I like the members of my work group.

2. My coworkers are similar to me.

3. My job utilizes my skills and talents well.

4. I feel like I am a good match for this company.

5. I fit with this organization's culture.

6. I like the authority and responsibility I have at this company.

7. My values are compatible with the organization's values.

8. I can reach my professional goals working for this organization.

9. I feel good about my professional growth and development.

Links to Community

1. Are you currently married?

2. If you are married, does your spouse work outside the home?

3. Do you own the home you live in?

4. My family roots are in the community where I live.

5. How many family members live nearby?

6. How many of your close friends live nearby?

Appendix D. (Continued)

Links to Organization

1. How long have you been in your present position?

2. How long have you worked for this company?

3. How long have you worked in the hospital industry?

4. How many coworkers do you interact with regularly?

5. How many coworkers are highly dependent on you?

6. How many work teams are you on?

7. How many work committees are you on?

Community-Related Sacrifice

1. Leaving this community would be very hard.

2. People respect me a lot in my community.

3. My neighborhood is safe.

Organization-Related Sacrifice

1. I have a lot of freedom on this job to decide how to pursue my goals.

2. The perks on this job are outstanding.

3. I feel that people at work respect me a great deal.

4. I would sacrifice a lot if I left this job.

6. My promotional opportunities are excellent here.

7. I am well compensated for my level of performance.

8. The benefits are good on this job.

9. The health-care benefits provided by this organization are excellent.

10. The retirement benefits provided by this organization are excellent.

11. I believe the prospects for continuing employment with this company are excellent.

Appendix E. Permission to Use JE Instrument

From: Tom Lee [orcas@uw.edu]
Sent: Saturday, March 8, 2014 2:15 PM
To: zelda gibbs; Terence R. Mitchell
Subject: RE: JE Instrument
Dear Zelda,

Thank you for your interest in our research. Yes, you may use our measure.

Yours truly,
Tom Lee

Thomas W. Lee
Hughes M. Blake Professor of Management &
Associate Dean for Academic and Faculty Affairs
Telephone: 206-543-4389
FAX: 206-616-3180

-----Original Message-----
From: zelda gibbs [mailto:zgibbs@patriots.uttyler.edu]
Sent: Friday, March 07, 2014 6:05 PM
To: Terence R. Mitchell; Tom Lee
Subject: JE Instrument
Greetings Drs. Mitchell and Lee,

Your JE theory is intriguing. The concepts of fit, link and sacrifice within the organizational and community dimensions make so much sense. Your studies mainly focused on voluntary turnover as an outcome measurement. However, I am more interested in exploring the relationship between JE and patient satisfaction with nursing care.

I am a Registered Nurse and doctoral student, enrolled in a PhD Nursing program at the University of Texas, at Tyler. My populations of interest include Registered Nurses (RNs) and Health Care Assistants (HCAs). I am developing a proposal to investigate the relationship between these two populations' JE and patient satisfaction in acute care facilities. I will also explore the differences in JE between RNs and HCAs. I have found numerous studies that examined the JE of RNs, but could not find any studies which involved HCAs. Another current gap involves studies to investigate the relationship between JE and quality of service in health care (or patient satisfaction in this case).
I kindly request your permission to use your JE instrument for my study.

Best Regards,
Zelda Gibbs

Appendix F. Nurse Job Satisfaction Index Instrument (Wieck et al., 2009)

Nurse Job Satisfaction Index©

K. Lynn Wieck, RN, PhD, FAAN – 2008
lynn@drwieck.com

Overall, how satisfied are you with your current position?

- ☐ Highly Satisfied
- ☐ Generally Satisfied
- ☐ Generally Dissatisfied
- ☐ Highly Dissatisfied

How likely are you to recommend your current employment setting to your nurse colleagues as a desirable place to work?

- ☐ Highly Likely
- ☐ Somewhat Likely
- ☐ Somewhat Unlikely
- ☐ Highly Unlikely

Knowing what you know now, if you had to decide all over again whether to take the job you have now, what would you decide?

- ☐ Would definitely take the same job
- ☐ Would probably take the same job
- ☐ Would probably NOT take the same job
- ☐ Would definitely NOT take the same job

To what extent are you fairly rewarded considering the responsibilities you have?

- ☐ Not at all
- ☐ To a slight extent
- ☐ To some extent
- ☐ To a considerable extent

☐ To a very great extent

Appendix F. (Continue)

Instruments: SATISFACTION LEVELS

Job satisfaction was measured by the summed score of four key questions: 1). How likely are you to recommend your current employment setting to a colleague as a desirable place to work? 2). Knowing what you know now, how likely are to take this same job again? 3). To what extent are you fairly rewarded considering the responsibilities you have? 4). Overall, how satisfied are you with your current position? Each response was a four-point scale. Higher scores mean higher job satisfaction. The sum score ranged from 4-17 (M = 11.97, *SD* = 2.8). Alpha reliability was 0.854. Factor analysis supported the items measured a single component.

Citation: Wieck, KL, Dols, J, & Northam, S. (2009). What nurses want: The Nurse Retention Project. *Nursing Economic*,.27(2), 169-177.

Appendix G. Permission to Use Nurse Job Satisfaction Index Instrument

TYLER

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November 4, 2014

TO: Zelda Gibbs, PhD candidate, The University of Texas at Tyler
FROM: K. Lynn Wieck, RN, Ph.D., FAAN

It is my pleasure to grant you permission to utilize the *Wieck Nurse Job Satisfaction Index*© in your research and class work. I am attaching a copy with this correspondence which includes citation and psychometrics information.

Thank you for your interest in this important topic of attracting and retaining nurses. We have found the *Wieck Nurse Job Satisfaction Index*© to be an excellent instrument for making general comments about the preferences of the different generations in today's nursing workforce regarding their perceptions of their satisfaction with their current job. Please note that this is not a career satisfaction instrument; it relates to their current work position only. It has helped us make recommendations to hospital administrators, human resources executives, and nurse managers to assist them in leading and managing an intergenerational workplace with a focus on retention. I wish you good luck in your studies.

Respectfully,

K. Lynn Wieck

K. Lynn Wieck, Ph.D., RN, FAAN
Chief Executive Officer
Management Solutions for Healthcare

Nursing Professor
The University of Texas at Tyler College of Nursing

Primary Investigator: Cultivating Leadership in the Emerging Workforce Research Program
Primary Investigator: What Nurses Want: The 2007 Nurse Incentive Project

Appendix H. Intent To Stay Instrument (Wieck et al., 2009)

INTENT TO STAY© (2008)

K. Lynn Wieck, RN, Ph.D., FAAN

A single item is proposed for use to indicate expected turnover among the RNs.

"How many more years do you plan on staying with your present employer?"

A space for input of a numerical quantity is provided. Support for using a single-item measure of intent to turnover is found in recent studies. Kovner et al (2007) reported on length of time new graduates planned to stay in their first RN job using a single item with the following five responses: "Don't know", "1 yr but less than 2 years," "2 years but less than 3 years," "3 years or more," "Indefinitely." Ulrich et al. (2007) used a single-item indicator of intent to leave current position in comparing Magnet and non-Magnet nurses. When asked if they had plans to leave their current positions in the next 12 months or the next 3 years, 43% of RNs in non-Magnet organizations reported such plans, compared with 38% in Magnet organizations and 32% in the In Process organizations ($P < .05$). Turnover for the current study is indicated as nurse's self-report of the number of years they intend to stay with their current employer. The responses ranged from 0 to 40 years ($M = 9.98$, $SD = 8.0$).

Refs:

Kovner CT, Brewer CS. Fairchild S, Poornima S, Kim H, Djukic M. (2007). Newly licensed RN's characteristics, work attitudes, and intentions to work. American Journal of Nursing, 107(9), 58-70.

Ulrich BT, Buerhaus PI, Donelan K, Norman L, Dittus R. (2007). Magnet status and registered nurse views of the work environment and nursing as a career. Journal of Nursing Administration, 37(5), 212-220.

Citation: Wieck, KL, Dols, J, & Northam, S. (2009). What nurses want: The Nurse Retention Project. *Nursing Economic,*.27(2), 169-177.

Appendix I. Demographic Questions

1. How old are you?
2. What shift do you usually work?
3. How many hours per week do you usually work?
4. How many years have you been working at this facility?
5. What is your job description?
6. What is your highest level of education?

Biosketch

Zelda Gibbs was born in Hopefield, South Africa in 1964. She graduated High School in 1981 and pursued a nursing career in the military where she received training as a student nurse. She graduated from nursing school with a diploma in general nursing in 1985. She got married in 1983 and the first of three children was born in 1984. She worked as a registered nurse in various hospitals over the next 15 years and advanced her knowledge and experience from a medical surgical staff nurse, to an emergency room charge nurse and nursing supervisor. Zelda moved with her family to the United States in 2000 and obtained a position in a local hospital's emergency room in Canton, Georgia as a staff nurse. Shortly after she settled in her new job, she enrolled in an online RN to BSN program at Chamberlain Nursing School. She completed her Bachelor in the Science of Nursing (BSN) degree in 2010 and immediately enrolled again at Chamberlain Nursing School in a Masters in the Science of Nursing (MSN) degree. She completed the MSN Executive Track degree in June 2012. At this time, she moved to Burleson, Texas and held an Education Specialist position in the Department of Education in a hospital in Dallas. Registered nurse (RN) retention and the roll that health care assistants (HCAs) play in the provision of patient care spiked her interest. She enrolled in a doctorate program at The University of Texas at Tyler and completed a Ph.D. in nursing in July 2015. She used a fairly new theory in nursing research, called job embeddedness (JE), to measure the differences of job embeddedness, job satisfaction and intent to stay between RNs and HCAs, and between three generations of these two populations, in an acute care facility. She also used demographic data such as age, years worked, shifts worked, level of education, and organizational and community subscales of JE to measure prediction of job satisfaction. This dissertation can be considered as a

groundbreaking study because no previous studies could be located where comparisons between the JE of RNs and HCAs in acute care facilities were measured.

A hospital system with a strong focus on nursing research showed interest in her philosophy of standardized HCA training to improve RN retention and patient satisfaction, and offered her a position at one of their hospitals in Fort Worth, Texas. Zelda will apply the results from her dissertation and general nursing knowledge to instigate a HCA training program at this hospital. She will also have opportunities to continue future research in her field of interest to explore the correlations between JE and nursing retention, patient satisfaction and employee work relationships in more detail.