

ABSTRACT

Mark C. Hand. JOB SATISFACTION AND INTENT TO LEAVE OF NURSING ASSISTANTS WORKING IN A HOSPITAL SETTING. (Under the direction of Dr. Martha Engelke) College of Nursing, April, 2015.

Nursing assistants are an important part of the healthcare team in hospitals. However, there has been little research about the antecedents of job satisfaction and intent to leave of nursing assistants in hospitals. The limited amount of research related to job satisfaction of nursing assistants has been done with nursing assistants in nursing homes. The purpose of this study was to examine the relationship between job satisfaction and intent to leave in hospital based nursing assistant in North Carolina. In addition, the influence of personal characteristics, role related characteristics and job characteristics were examined.

The study used a descriptive correlational survey design using the Hospital Nursing Assistant Job Satisfaction Questionnaire. Participants in this study were most satisfied with the work content, coworkers, workplace support, and work schedule. Data revealed a significant relationship between intent to leave, education level and hospital tenure. The strongest predictors for job satisfaction were work schedule, coworkers, chances for more training, and on the job training. The strongest predictors for intent to leave were workplace support, work schedule, and recommend the hospital to a friend.

This study represents a beginning understanding of the factors that are associated with job satisfaction and intent to leave of nursing assistants in the hospital setting. Job satisfaction and intent to leave variables have been identified and need further examination to insure that nursing assistants are retained and productive members of the healthcare team.

JOB SATISFACTION AND INTENT TO LEAVE OF NURSING ASSISTANTS IN THE
HOSPITAL SETTING

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DEDICATION

This dissertation is dedicated to all of the hardworking hospital nursing assistants and especially to those who took the time to share their thoughts for this research study.

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This dissertation would not have been possible without the help and support of so many people in so many ways. First, I would like to acknowledge my partner, Terry. Without his daily support, understanding, and continuous assistance with keeping the house in order, I would have never completed this dissertation. He has been by my side since day one of my doctorate education and never gave up on me. I would also like to thank my dissertation chairperson, mentor, and teacher Dr. Martha Engelke for instilling in me the qualities of nurse researcher. I am also grateful to the expert statistician, dissertation committee member, and teacher, Dr. Mel Swanson who was always there for me to help with the numbers. Thanks Mel for all that you have taught me! I also would like to thank my dissertation committee members Dr. Donna Roberson, a friend and colleague and Dr. Linda Burhans, for her expertise with practice, education, and regulation of nursing assistants. I would also like to thank Laura Barnes for her help with Qualtrics, the North Carolina Board of Nursing for providing the sample of nursing assistants, and all of my fellow colleagues at East Carolina University College of Nursing and Durham Technical Community College Nursing Program. Lastly, I would like to thank my parents who made me the person that I am today. They would have been so proud!

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CHAPTER ONE: INTRODUCTION

Problem Statement

Nursing assistants (NA's) are an important part of the healthcare team in hospitals. They provide direct patient care and emotional and physical support for patients. The Bureau of Labor Statistics (2014) reported that the growth in employment of the NA is expected to increase by 20% from 2010 to 2020, faster than the average for all occupations. In 2012, there were 1.5 million jobs held by NA's in the United States, 15 % of these positions were in the hospital setting (Bureau of Labor Statistics, 2014). According to a study that used a large sample of acute care hospitals in the United States and examined nurse-staffing levels, NAs provided 21% of hands-on care to patients in the hospital setting (Needleman, Buerhaus, Mattke, Stewart & Zelevinsky , 2012). The utilization of NAs in acute care hospitals within the United States continues to increase (Potter, Desheids & Kuhrik, 2010). Intended as an adjunct to support delivery of care to patients, the NA role is designed to work collaboratively under the direct supervision of a registered nurse (RN) and to perform repetitive, low risk tasks.

Although the NA is an important participant in care provided to hospitalized patients, increased competition among hospitals for a limited supply of health care workers, rising patient acuity, and high workloads work together to decrease job satisfaction and increase turnover of health care workers, including NAs (Geiter, Hofmans & Pepermans, 2011). Studies related to job satisfaction among healthcare workers in hospitals have primarily focused on professional nurses. Job dissatisfaction has been identified as the most important reason why nurses leave their jobs (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Irvine & Evans, 1995). Studies of hospital nurses have demonstrated that high turnover rates have an adverse effect on patient outcomes, patient satisfaction, hospital operating costs, and worker productivity (Beecroft, Dorey

& Wenten, 2008; Hayes et al., 2006; Gauci-Borda & Norman, 1997; Price & Mueller, 1981). However, there has been little research about the antecedents of job satisfaction, intent to leave and turnover among NAs in hospitals (Kalisch, Lee & Rochman, 2010). The limited amount of research related to job satisfaction of NAs has been done in nursing homes (Castle, Degenholtz, & Rosen, 2006; Karsh et al., 2005; Lapane & Hughes, 2007; Robison & Pillemer, 2007; Zimmerman et al., 2005). Therefore the purpose of this study is to examine the relationship between job satisfaction and intent to leave in the hospital based NA.

Background and Significance

Nursing assistants also known as nursing aides, unlicensed assistive personnel and care partners are employed in hospitals, nursing homes, medical offices and other health care settings. The American Nurses Association (2007) describes the role of the NA as an unlicensed individual “who is trained to function in an assistive role to the licensed nurse in the provision of patient/client activities as delegated by the nurse. These activities can generally be categorized as either direct or indirect care” (p. 4). State Boards of Nursing have recognized the unlicensed worker whose role is to assist the registered nurse in the provision of health care. The role of the nursing assistant, therefore, is to assist the nurse in providing direct patient care consistent with national standards of practice and state nurse practice acts.

Nursing assistants began as a volunteer group during the Revolutionary War and were women who were not formally trained in the art and science of nursing (Fox-Rose, 2000). These volunteers cared for the sick and wounded whenever American military personnel were injured in battle. In 1912, the United States Army publicly recognized the need to provide female nursing services by trained nurses and NAs (Fox-Rose, 2000). The American Red Cross was

requested to provide a training course for NAs and in 1915, Bellevue Hospital in New York City established the first NA training program (Fox-Rose, 2000).

In less than a year before the start of World War II, the American Red Cross NA training program was adapted to include courses needed for nursing skills performed in hospitals. On January 28th, 1940, twenty-three women graduated from the first hospital-based training program for NA's. Between 1944 and 1945, thousands of NAs were called to assist nurses during World War II (Fox-Rose, 2000).

Throughout the twentieth century, NAs worked with nurses in a variety of health care settings. Until the 1960's, nursing departments organized nurses and NAs into teams. RNs were team leaders; licensed practical nurses (LPN) dispensed medications and completed physician – ordered treatments and the NA helped with patients to complete personal tasks of daily living such as bathing, feeding and toileting (Huber & Blegan, 1994). Medical technologies created the need to care for patients in new ways, an important factor in the development and utilization of the NA from the mid to late twentieth century.

For a thirty-year period, from the early 1960's to the late 1980's, job opportunities for hospital NAs declined dramatically (Huber & Blegan, 1994). The team model of nursing practice was abandoned in favor of the primary care model (one patient/one nurse) and the use of all nurse staff. By the mid-to-late 1980's, medical technologies proved to be cost prohibitive and hospital budgets were stretched to the financial limit (Huber & Blegan, 1994). As a result, many hospitals became financially bankrupt and budget cuts became a necessity. This led to a decrease in licensed nurse services and the use of more NA services. Hospitals began hiring, training, and cross –training NAs in large numbers and the trend continues into the late twenty-first century and beyond. The Bureau of Labor Statistics (2010) reported that the growth in

employment of the NA is expected to increase by 20% from 2010 to 2020, faster than the average for all occupations. In 2010, there were 1.5 million jobs held by NAs in the United States, 15 % of these positions were in the hospital setting (Bureau of Labor Statistics, 2010).

In the state of North Carolina, NAs have two distinct role titles, NAI and NAII (NCBON, 2014). In 1987, President Ronald Reagan signed into law the first major revision of the federal standards for nursing home care (Grimaldi, 1987). This landmark legislation, the Omnibus Budget Reconciliation Act (OBRA), changed forever society's legal expectations of nursing homes and their care provided to residents. Long term care facilities wanting Medicare or Medicaid funding were required to provide services so that each resident can receive the highest quality of care. One of the mandates referencing nursing staff working at long term care facilities requires demonstration of competencies and training of all unlicensed personnel. In 1988, the North Carolina Board of Nursing (NCBON) created a task force consisting of personnel from hospitals, long-term care, home health, and community college (NCBON, 1991) to address regulation of NAs across the state regardless of the work setting. The NCBON wanted to make sure that they were consistent with the requirements of OBRA's training, competency evaluation and scope of activity for NAs. It was identified that based on what the NAs current scope of activity was, the hospital NA were being asked to complete additional tasks that other NAs were not doing in long term care facilities. On March 1st of 1989, North Carolina became the first state to regulate NAs in all practice settings and the first to identify training, competency evaluations, and scope of practice components for the NAII role (NCBON, 1991).

The NAI must successfully complete a state approved NAI training and competency evaluation or competency evaluation program (NCBON, 2014). The NAI performs basic nursing skills and personal care activities including personal care, body mechanics, nutrition,

elimination, safety and special procedures (vital signs, clean dressing changes, postmortem care). An RN or LPN may delegate nursing care activities that are appropriate for the level of knowledge and skill of the NAI. The Division of Health Service Regulation (DHSR) in North Carolina maintains the registry of all NAIs (DHSR, 2014).

The NAII must successfully complete a NCBON state approved NAII training program and competency evaluation program (NCBON, 2014). The NAII must also have a GED or high school diploma, be listed as a NAI on the DHRS registry and have no substantiated findings of abuse, neglect, or misappropriation of property. The NAII performs the same skills as the NAI but the NAII also performs more complex nursing skills that emphasize sterile technique in elimination, intravenous assistive activities, oxygenation, and nutrition. An RN or LPN may delegate nursing care activities that are appropriate for the level of knowledge and skill of the NAII. The NCBON maintains the registry for all NAIs (NCBON, 2014).

A study by the North Carolina Hospital Association (NCHA) examined turnover rates of health care workers in hospitals. The survey asked hospital administrators about employment, vacancy, turnover, and search-related questions for all healthcare professions. The study found that turnover among hospital NAs was higher than among other nursing personnel (e.g., registered nurses and licensed practical nurses) in the hospital setting (NCHA, 2010). Nursing assistants top the turnover list at 18.5% (5 year average retention), nurses at 14%, and licensed practical nurses at 17%. This report did not examine the factors contributing to this high turnover rate in NAs.

A study by Kalisch, Lee & Rochman (2010) examined the influence of hospital unit characteristics, staff characteristics and teamwork on job satisfaction of hospital nursing staff and

included NAs. The results of this study demonstrated that NAs were less likely to be satisfied with their occupation than nurses. The NAs in this study were less educated, less experienced and younger than the RNs. Also NAs who cared for more patients reported a lower satisfaction.

When hospital employees leave an organization, either voluntarily or involuntarily, the impact can be substantial. Turnover has been directly linked to rising employee recruitment and training costs, low levels of employee morale, job satisfaction, and customers perception of service quality (Gieter, Hofmans & Pepermans, 2011). Hospitals need to invest additional time and money to fill the created vacancies and train the newly hired nursing staff. The quality of their delivered patient care is often reduced and in the end, high turnover rates may even threaten the continuation of the hospital. As far as the remaining staff is concerned, turnover has a negative effect on staff cohesiveness and it significantly increases workload (Gieter, Hofmans & Pepermans, 2011).

Conceptual Model

The conceptual model that guided this study is based on the Price & Muellers's Causal Model of Turnover (Price, 1977, 1981, 2001; Price & Mueller, 1981) and King's Theory of Goal Attainment (King, 1997). Figure 1 displays the conceptual model that guided this study.

King's Theory of Goal Attainment

The Theory of Goal Attainment defines nursing as “ a process of action, reaction and interaction by which nurse and client share information about their perception in a nursing situation” and “a process of human interactions between nurse and client whereby each perceives the other and the situation, and through communication, they set goals, explore means and agree on means to achieve goals” (Sieloff & Messmer, 2010, p290). In this definition, action is a sequence of behaviors involving mental and physical action, and reaction is included in the

sequence of behaviors described in action (Sieloff & Messmer, 2010). King describes the goal of the nurse is to help individuals to maintain health so they can function in their roles (King, 1997). The original NH-CNA-JSG created by Castle and colleagues (2010) utilized King's Theory of Goal Attainment as a theory foundation. The role of the NA in the care of patients consists of interacting with patients during their care. Since the NA role in the hospital is to provide care and assistance with patients, this theory can also provide the same foundation. Many nursing research studies have used King's Theory of Goal Attainment as a theoretical basis. (Hanucharunkui & Vinya-nguag, 1991, Froman, 1995, Hanna, 1995, Kameoka, 1995, Anderson, 2000; Mahon, 2001.).

Causal Model of Turnover

In the spring of 1972, James Price a sociology professor and a small group of sociology graduates students at the University of Iowa completed an extensive review of the literature on voluntary turnover in organizations (Price, 1977). The purpose of this review was to develop a preliminary causal model of voluntary turnover. Based on his review of the literature on turnover in organizations, Price proposed that economic models of turnover focused on too narrow a range of determinants to explain turnover adequately. Price felt that there needed to be a more inclusive model of turnover than those proposed by economists. Price also studied the concept of turnover to come up with a clear definition for the model. It was also important to identify the types of turnover, measurement of turnover, and the variables that were related to turnover (Price, 1977).

The review resulted in a series of summaries and critiques of the literature. There was a summary and critique for each piece of literature reviewed. Different terminologies were used to describe the various determinants; some of the proposed determinants were overlapping; a causal

order was not proposed for the determinants; a beginning for the causal sequence was not specified; and some of the determinants were not empirically well supported (Price, 1977). A sizeable amount of work thus remained to be done to develop a preliminary model. The summaries and critiques, by themselves, it was determined, were clearly not sufficient. During the 1972-1973 academic year, Price was on leave from the University of Iowa as a research professor at Bradford University in Bradford, England. During this time he transformed the summaries and critiques into a preliminary model. The model that was constructed included variables such as pay (the amount of money, or equivalents, distributed in return for service), integration (the degree to which an individual has close friends among organizational members), communication (the degree to which information is transmitted among the members of the social system), centralization (the degree to which power is concentrated in a social system), job satisfaction (the degree to which individuals like their jobs), and opportunity (the amount of potential from lower to higher status within an organization). (Price,1977).

Building on the original model of turnover, Price was joined by Dr. Charles Mueller (1981), a statistician from the sociology department at the University of Iowa associated hospitals. They were among the first to propose a causal model of turnover for nurses. A pilot study with nurses from seven general hospitals in Iowa was conducted to evaluate the causal model of turnover (Price & Mueller, 1981). A questionnaire that was originally developed by Price (1972) was mailed to nurses from seven hospitals and returned to the researchers. Variables included in this study were opportunity (the availability of alternative jobs in the organization), routinization (the degree to which a job is repetitive), participation (the degree of power that an individual exercises concerning the job), instrumental communication (the degree to which information about the job is transmitted by an organization to its members), integration (the

degree to which an individual has close friends among organizational members), pay (the amount of money, or equivalents, distributed in return for service), distributive justice (the degree to which rewards and punishments are related to the amount of input into the organization), promotional opportunity (the amount of potential from lower to higher status within an organization), professionalism (the degree of dedication to occupational standards of performance), general training (the degree to which the occupational socialization of an individual results in the ability to increase the productivity of different organizations), kinship responsibility (the degree of an individual's obligations to relatives in the community in which an employer is located), job satisfaction (the degree to which individuals like their jobs), and intent to stay (the estimated likelihood of continued membership in an organization (Price & Mueller, 1981). Total effects on turnover were found to be the greatest for intent to leave, opportunity, general training, and job satisfaction. Turnover was increased by opportunity and general training but decreased by intent to stay, satisfaction, and kinship responsibility (Price & Mueller, 1981).

A later study was conducted using five hospitals in Denver, Colorado and a sample of all of the employees working in these hospitals (Price & Mueller, 1986) were surveyed. Variables used in this study were the same as in the previous study (Price & Mueller, 1981). Total effects on turnover were found to be the greatest for intent to leave, satisfaction, pay, kinship responsibility, opportunity, and integration (Price & Mueller, 1986). Turnover was increased by intent to leave and more opportunity and decreased by high satisfaction, pay, kinship responsibility, commitment, and integration (Price & Mueller, 1986).

Castel et al (2007) modified the model of turnover developed by Price & Mueller (1981) to represent the nursing home context. This conceptual model examines job satisfaction as it

relates to intent to leave and job turnover. The model demonstrates that intent to leave is influenced by personal characteristics, job characteristics, role-related characteristics, turnover characteristics, and facility characteristics. The advancement of intent to leave occurs in three phases including thinking about leaving, thinking about searching for a job, and searching for the job. In each phase, the intent to leave of the individual increases. The final outcome of the model, actual turnover, is influenced by all of the characteristics and intent to leave (Castle et al, 2007).

The conceptual model that was used for this study has been modified for the NA working in a hospital (see Figure 1). According to the model, intent to leave is influenced by personal characteristics, role-related characteristics, facility characteristics, job characteristics, and job satisfaction. In this model, personal characteristics include age, gender, race and education; role-related characteristics include length of employment, title, number of work hours and unit worked; facility characteristics include bed size of hospital, type of hospital and magnet status; job characteristics include coworkers, workplace support, work content, work schedule, training, rewards, and quality of care. In the model by Castle et al, (2007), the facility characteristics include those that relate to a nursing home such as ownership, chain membership, private-pay occupancy, and case mix. Castle et al, (2007), examined actual turnover of NAs who completed the questionnaire by sending a follow-up survey after 1 to those that gave permission to survey them about whether they were still employed at the nursing home. For the current conceptual model, turnover was not examined due to the purpose of the study which is examining only job satisfaction and intent to leave.

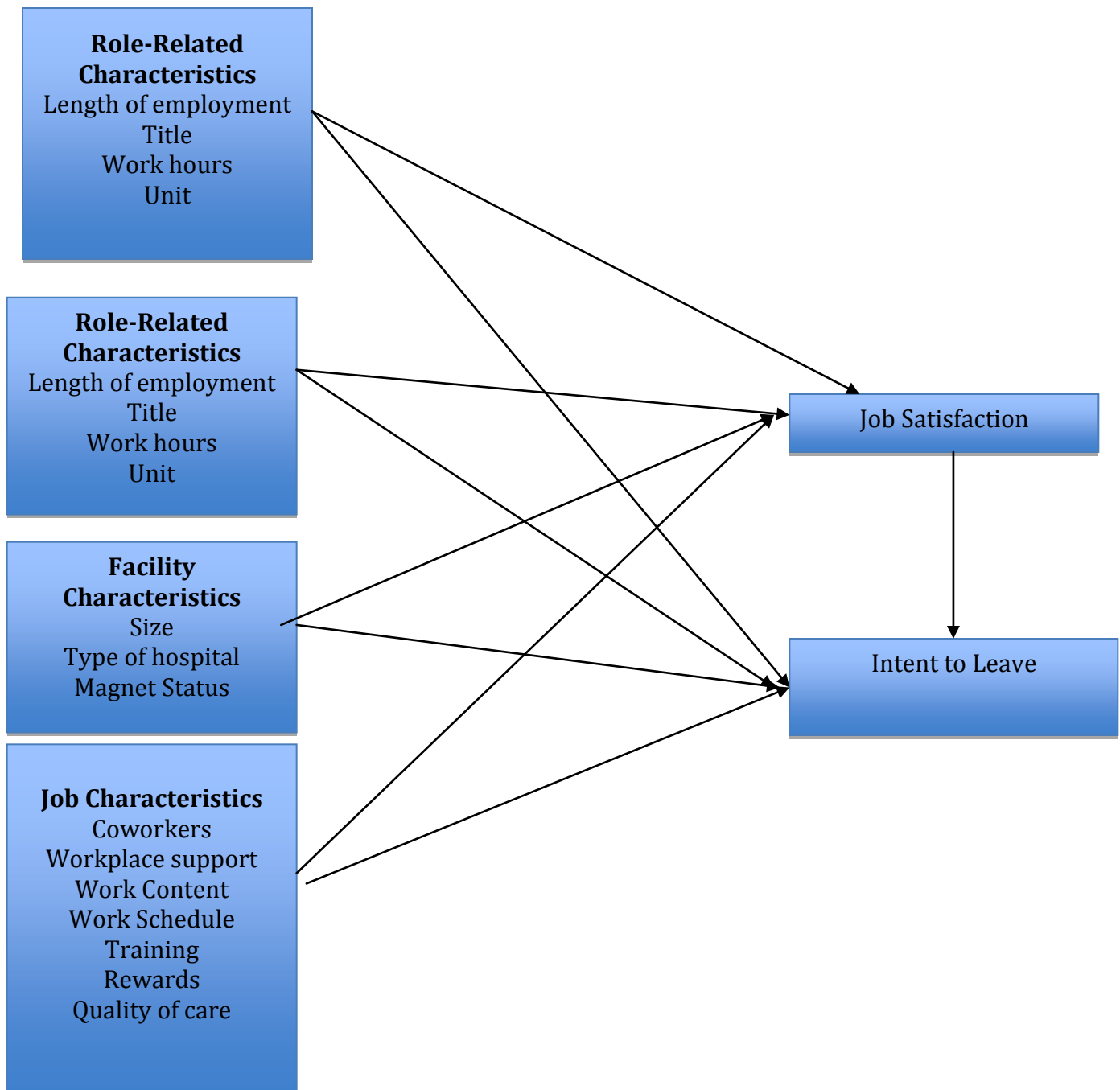


Figure 1. Conceptual Model for Job Satisfaction and Intent to Leave

Research Questions

1. What are the personal characteristics, role-related characteristics, facility characteristics, and job characteristics of nursing assistants that work in hospitals?
2. What are the psychometric properties, job satisfaction scores, and intent to leave scores on the Job Satisfaction Measure and Intent to Leave Measure?
3. What is the relationship between personal characteristics, role-related characteristics, and job satisfaction on intent to leave of nursing assistants that work in hospitals?
4. Which combination of factors (personal characteristics, role-related characteristics, job satisfaction) are the best predictors of job satisfaction and intent to leave in nursing assistants that work in hospitals?

Summary

Nursing assistants in the hospital setting continue to play a vital role in the care of the hospitalized patient. Developing a culture of care that supports patient safety, quality, and satisfaction among healthcare workers is essential in the hospital environment. As the healthcare system becomes more sensitive to cost escalation, there will be a greater number of NAs providing direct patient care (Bureau of Labor Statistics, 2010). Findings from this study may help nurse managers and administrators to better understand how to reduce the turnover among NAs. Job dissatisfaction is reported to be strongly associated with nursing staff turnover and intent to leave thus highlighting the importance of understanding what promotes NAs job satisfaction.

CHAPTER 2: LITERATURE REVIEW

Studies of job satisfaction and turnover of NAs have mainly focused on those that work in the long-term care settings (Castle, Engberg, Anderson & Men, 2007; Decker, Harris-Kojetin, & Bercovitz, 2009; Pennington, Scott, & Magilvy, 2003; Crickermer, 2005; Mather & Bakas, 2002). These studies have shown dissatisfiers to be excessive workload, not being recognized and valued for their contributions, pay, benefits, and supervisor support. A few studies have examined the relationship between NAs job satisfaction and intent to leave in nursing homes (Parsons, Simmons, Penn, & Furlough, 2003; Kiyak , Nemazi, & Kahana, 1997; Coward et.al, 1995; Humphris & Turner, 1989). However, no studies were identified that examined hospital based NAs job satisfaction and intent to leave. This chapter presents a review of the literature related to job satisfaction and intent to leave among NAs. This chapter begins with the search strategies used to identify the studies of NAs and job satisfaction and intent to leave. The proposed conceptual model is used to organize the review. The factors identified that are discussed include personal characteristics, role-related characteristics and job related characteristics. Finally, literature related to a measurement tool related to job satisfaction instrument in NAs is discussed.

Search Strategy

Studies for this literature review were identified by searching the following online electronic databases: CINHALL, MEDLINE, Google Scholar, Proquest Nursing and Allied Health, and PsycInfo. Search terms used were: nurses aides, nursing assistant, certified nursing assistant, unlicensed assistive personnel, job satisfaction, intent to leave, and turnover. Inclusion criteria for studies for this review were: (1) peer-reviewed and published in English; (2) the study

population consisted of NAs working in hospitals or nursing homes; (3) examined factors associated with job satisfaction of NAs. Studies that met the inclusion criteria and were published before January 2014 were included for review. The initial search resulted in the identification of 372 publications of which 117 were duplicate titles. Figure 2 displays the search method. The titles of the 255 remaining publication titles and abstracts were reviewed to determine if they met the inclusion criteria. Based on the title review, 112 publications did not meet the inclusion criteria, with the majority of the 85 being excluded because they were studies about nurses' job satisfaction. Of the remaining 143 studies, abstracts were then reviewed and 108 were excluded that did not meet the inclusion criteria of examining factors associated with job satisfaction. Full text review was conducted for the 35 remaining studies.

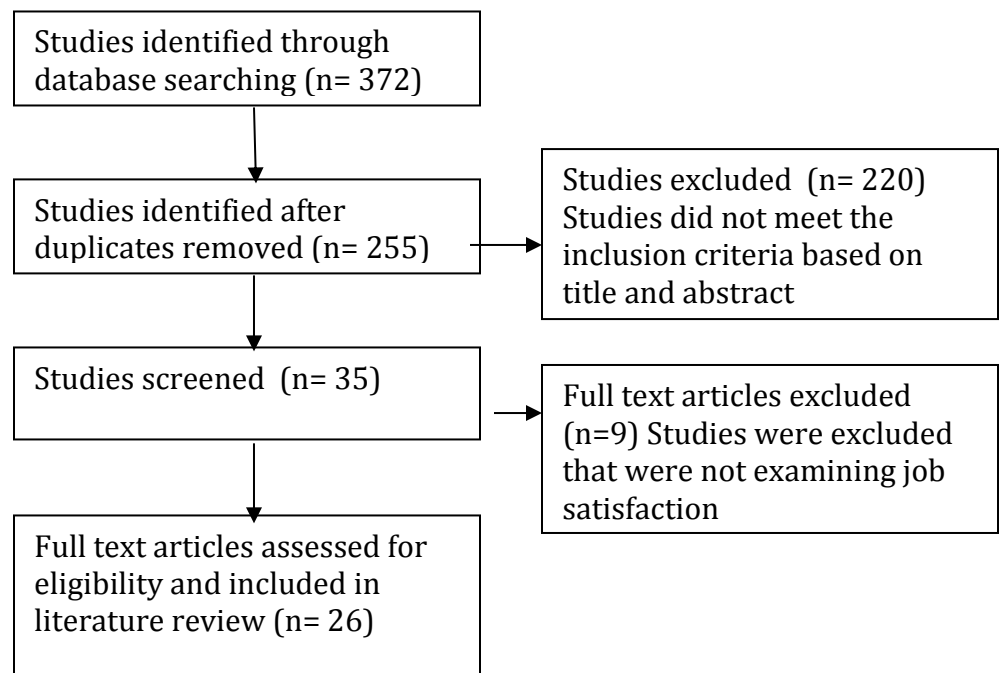


Figure 2. Search and Retrieval Process -PRISMA Flow Diagram (PRISMA, 2011).

Nine of the remaining studies were excluded because they were not research studies examining factors associated with job satisfaction. Twenty-six studies are included in this review.

Personal Characteristics

Age

Older age has consistently been identified as a strong predictor of job satisfaction among nursing home care workers (Castle et al., 2006; Grau et al., 1991; Karsh et al., 2005; Kiyak et al., 1997; Schaefer & Moos, 1996; Zimmerman et al., 2005). Accordingly, older workers are less likely to think about quitting and leave the job than younger workers (Brannon et al., 2007; Grau et al., 1991; Karsh et al., 2005; Kiyak et al., 1997; Schaefer & Moos, 1996). For example, Kiyak et al. (1997) studied how personal characteristics (i.e., age, marital status, and training), job characteristics (i.e., type of work, length of employment), and attitudes (i.e., affect toward clients and elders) influence job satisfaction and turnover of female workers serving older persons. Of 308 study participants, 258 were employees of six nursing homes. The Job Description Index (JDI) was used to measure job satisfaction. Intention to leave the job was assessed through responses to the question, "Taking everything into consideration, how likely is it you will try to find another job within the next year?" A series of multiple regression analyses identified that age had a strong effect on job satisfaction ($\beta = .19$) and on actual turnover ($\beta = .36$). Older workers were more satisfied, had less intent to leave, and stayed on the job. Karsh et al. (2005) also found that older NAs were more satisfied with intrinsic and extrinsic factors in their jobs and were more likely to intend to stay at their facilities.

Education Level

Workers with higher education levels have been found to be less satisfied with their jobs and more likely to leave than those who have limited education (Brannon et al., 2007; Grau et al., 1991; Grieshaber, 1995; Karsh et al., 2005). Grieshaber and colleagues (1995) studied job satisfaction of NAs in two nursing homes in Missouri, one in an affluent suburban neighborhood ($n = 32$) and the other in economically depressed urban area ($n = 47$). Job satisfaction was measured by administering the short form of the Minnesota Satisfaction Questionnaire. Researchers found inverse correlations between education level and overall job satisfaction among NAs at the suburban nursing home. Karsh et al. (2005) also reported that respondents with some college education were less extrinsically satisfied than those with up to a high school degree. Furthermore, in the Brannon et al. (2007) study, NAs with greater than a high school degree or its equivalent were three times more likely to be in the “very likely to quit” group.

Gender

In most of the studies conducted in nursing homes, approximately 90% to 100% of participants were female (Grau et al. 1991; Karsh et al., 2005; Kiyak et al., 1997; Parsons et al., 2003; Zimmerman et al., 2005). In addition, a few studies did not report gender of study participants (Allensworth-Davies et al., 2007; Garland et al., 1989; Grieshaber et al., 1995; Ramírez et al., 1998). Among studies that were reviewed, only Castle et al. (2006) reported gender differences in job satisfaction. In that study, male workers were less satisfied with work than females.

Race and Ethnicity

Several studies have found that minority workers were less satisfied with their jobs than nonminority workers. Ramírez et al. (1998) reported that being Jamaican or Haitian/African Caribbean predicted lower levels of satisfaction. Karsh et al. (2005) identified that native English speakers were more satisfied with the intrinsic factors in their jobs. In addition, Caucasian workers were more likely to intend to stay at their facilities. Zimmerman et al. (2005) also found that job satisfaction was higher among workers who were not Black. Moreover, Ejaz et al. (2008) reported that minority NAs had lower levels of job satisfaction.

On the other hand, in the study conducted by Schaefer and Moos (1996), being of Asian origin was associated with job satisfaction, stronger intent to stay in the job, and less job-related distress, depression, and physical symptoms. Also, Castle et al. (2006) found that African American NAs were more satisfied with their work environments in areas such as management practices and relationships with coworkers.

Role-Related Characteristics

Length of Employment

Several researchers reported that the length of employment and the level of job satisfaction are correlated. Grieshaber et al. (1995) found that both job tenure and occupational tenure were positively associated with job satisfaction of NAs working in a suburban nursing home. Kiyak et al. (1997) also found that the length of time employees had worked at their facilities was negatively associated with turnover intention and actual turnover. Those who worked longer were less likely to think about quitting their jobs and leaving. Moreover, Robison et al. (2007) identified that longer years working in any nursing home, thus more years working

in the nursing home industry, was related to less likelihood of leaving the job in the next 12 months. Similarly, Decker et al. (2009) found that NAs who had more years of experience as NAs as well as in the facility were less likely to think about leaving their jobs.

On the contrary, some researchers have found that workers with longer tenure were less satisfied. Karsh et al. (2005) found that nursing home employees who had longer tenure were less extrinsically satisfied than those with the least tenure. Castle et al. (2006) reported that nurses and NAs who have been on the job for one to five years were generally less satisfied than those who have been there for either less than one year or more than five years.

Facility Characteristics

A few studies have identified facility characteristics and the relationship to job satisfaction in a hospital setting for nursing staff. Castel et al (2007) examined facility characteristics of nursing homes that had been reported in other studies to have an association with nursing staff turnover. A separate questionnaire was sent to nursing home administrators who were participating in the study that was examining job satisfaction of NAs in nursing homes. The questionnaire included questions about staffing levels, turnover rates for nursing staff, ownership, chain membership, occupancy, private-pay occupancy, and case-mix (Castel et al, 2007). The study found that there were a few significant differences that existed on facility characteristics (bed size, ownership, case mix, private pay occupancy and average occupancy) for participating nursing homes compared to nonparticipating nursing homes (Castle et al, 2007).

In a study by Kalisch and Lee (2014), the relationship between unit level hospital staffing of RNs and NAs, patient acuity, and job satisfaction were examined. This study included 3523 RNs and 1012 NAs from 131 hospital patient units. RNs reported being more satisfied with their

job when the staffing level was high. The number of patient hours per day was a significant predictor for RNs job satisfaction after controlling for covariates (age, gender, nursing education and job experience). The level of nursing staff did not predict NA job satisfaction and NAs reported being more satisfied when there were more NAs and less RNs in the staffing mix.

Harrington & Swan (2003) examined the relationship between nurse staffing levels, nursing turnover rates, resident case mix, and facility characteristics of RNs working in nursing homes in California. Facility characteristics included for-profit facility, nonprofit facility, chain owned, rural facility, number of facility beds and occupancy rate. The results showed that for-profit facilities had less total nurse staff hours than nonprofit facilities. The nursing homes that had lower occupancy had higher nurse staffing hours. Bed size, being in a rural area and chain owned did not predict total staffing hours. Turnover rates were a predictor for-profit facilities and the proportion of Medicaid residents. Turnover rates were not a predictor for rural facilities, the number of beds, and occupancy rates.

Job-Related Characteristics (Job Satisfaction)

Co-Workers & Workplace Support

Supportive relationship with coworkers and supervisors is another significant determinant of job satisfaction of direct care workers. While positive contact with a supervisor provides guidance and feedback, contact with peers helps workers cope with work stress by feeling comfort and friendship, establishing a sense of identity, and developing problem-solving skills (Lerner & Resnick, 2011). Ramírez et al. (1998) identified that frequency of attendance at support group meetings where staff can discuss their feelings in caring for difficult residents was related to job satisfaction among NAs. Parsons and colleagues (2003) found that coworker support predicted job satisfaction among NAs. Also, in the study by Schaefer and Moos (1996),

coworker cohesion (i.e., how friendly and supportive employees are to each other) was positively associated with job satisfaction and intent to stay. Likewise, Robison and Pillemer (2007) reported that NAs that were close to coworkers were more satisfied and less likely to quit the job.

Using a subsample of the National Nursing Assistant Survey (NNAS) ($n = 2,252$), Bishop and colleagues (2009) examined how variables related to compensation, job demands, supervision, coworker, job design, organizational context, personal characteristics, and local labor market conditions affect job satisfaction of NAs working in nursing homes. A series of ordered logistic regression analyses were performed. Findings showed that NAs who responded that they felt respected and rewarded for their work by the facility were less likely to be dissatisfied with their jobs, as were those who reported that their employer valued their work.

Grau et al. (1991) identified that positive social atmosphere, such as the warmth and friendliness of the facility and supportiveness of co-workers and superiors was a more important predictor of institutional loyalty than other job characteristics, such as job tasks and job process. Particularly, supervisory relationships and quality of supervision have been found to have strong associations with job satisfaction of NAs. In the study by Robison and Pillemer (2007), NAs who “get along with supervisors” had higher job satisfaction and were less likely to quit their jobs.

Garland et al. (1989) also found that supervision was positively associated with job satisfaction. NAs who participated in the study ($N = 138$) were recruited from 45 randomly selected nursing homes in Ohio. Researchers examined different aspects of work (e.g., supervisor’s expectations, communication, and evaluation of job performance, access to supplies and information, adequacy of training, family-work conflicts) and how they affect job satisfaction. Overall job satisfaction was measured using a previously developed six-item scale.

When correlations among variables were examined, supervision was most strongly associated with job satisfaction ($r = .48$), followed by the frequency of personal recognition NAs received from supervisors ($r = .34$). NAs had higher levels of job satisfaction when they felt that their supervisors provided adequate information, demonstrated clear expectations and evaluations, and respected their opinions.

An Australian study identified that professional support, including the amount of support and guidance, the opportunities to discuss concerns, quality of supervision, and respect and fair treatment from superiors was a major component driving staff satisfaction. Chou, Boldy, and Lee (2002) assessed relationships among five components of staff satisfaction (i.e., personal satisfaction, workload, team spirit, training, and professional support) in residential elder care. Data were collected from 983 staff working at 70 randomly selected long-term care facilities in Western Australia. Participants included 610 nursing home employees and 38% of them were NAs. The Measure of Job Satisfaction instrument developed by the researchers was used to assess five components of job satisfaction. Results of structural equation modeling of NAs' satisfaction indicated that satisfaction with professional support has a strong and positive effect on all aspects of job satisfaction in the sample of nursing home employees.

Further, previous studies identified the association between supervision and turnover. Parsons et al. (2003) found that the satisfaction with supervision (i.e., supervisory support, equality in supervision, and supervision competence and skill) was significantly related to overall job satisfaction and turnover. Brannon et al. (2007) identified that NAs in nursing homes who perceived higher quality supervision in the aspects of support and structure were more likely to stay on the job. Bishop et al. (2008) found that basic supervision (i.e., perceived respect, help, and feedback from supervisors) was a strong predictor of intent to stay among NAs. Among the

studies that used the National Nursing Assistant Survey data, Stearns and D'Arcy (2008) identified that positive supervisor qualities influenced intent to leave and job search behavior. On the other hand, Decker et al. (2009) found favorable assessment of supervisor behavior was associated with overall job satisfaction, but not with intention to leave.

Work Content

Researchers have identified the association between quantitative workload and job dissatisfaction. In the Ramírez et al. (1998) study, NAs who had higher proportions of residents who were incontinent and those who felt they had a heavy assignment were less satisfied with their jobs. Karsh et al. (2005) found that work pressure was negatively associated with intrinsic and extrinsic job satisfaction. Hasson and Arnetz (2007) also reported that perceived work stress related to lack of time for planning and executing tasks was negatively associated with overall satisfaction. Among the subsample of the National Nursing Assistant Survey, Bishop and colleagues (2009) identified not having enough time to carry out ADL tasks for residents or enough time for other tasks was related to lower job satisfaction.

Accordingly, heavy workload has been found to be related to turnover. Brannon and colleagues (2007) identified that intention to leave among care workers in nursing homes was influenced by work overload (e.g., having too much work, experiencing emotional and physical demands). Further, Robison and Pillemer (2007) found that nursing staff who experienced time pressure (i.e., being short of time to accomplish the required tasks) had lower job satisfaction and were more likely to leave the job.

Work Schedule

A few studies have identified shift and employment status as predictors of job satisfaction of NAs employed at nursing homes. In a study by Burgio et al. (2004) NAs on the evening shift had higher turnover rates than those on the morning shift. Karsh et al. (2005) also found that night shift workers were less satisfied than day shift workers. In addition, nursing home employees working 40 hours per week compared to those working less were more likely to intend to stay at their facilities. On the other hand, Castle et al. (2006) found that full-time NAs were less satisfied with pay than part-time workers, but more satisfied with the work.

Training

Training opportunities seem to be a particularly important source for satisfaction of NAs. In the Bishop et al. (2008) study, NAs who felt the chances of promotion were good were more likely to stay in their jobs. Parsons et al. (2003) reported that satisfaction with opportunities for personal and professional growth and involvement in decisions on the job were most significantly related to both overall satisfaction and turnover intention.

A study conducted in two Swedish nursing homes also found that perceived opportunities for professional development at work were associated with overall job satisfaction (Hasson & Arnetz, 2007). Participants were 565 nursing staff, including nurses and NAs. The subscales of Quality-Work-Competence Questionnaire (QWC) were used to measure the perceptions regarding skill development (e.g., opportunity to use one's knowledge, job tasks helping one's professional development), work stress, work-related exhaustion, and mental energy. Job satisfaction was measured by a single question, "How satisfied are you overall with your work situation?" Results of a multiple regression analysis showed that skill development, work-related

exhaustion, mental energy, and work stress were all significant predictors of job satisfaction ($R^2 = .46$). NAs who perceived they had opportunities for professional development at work had higher job satisfaction.

Karsh and colleagues (2005) found that NAs who felt that they received necessary training were more committed and satisfied with the extrinsic features of their jobs. Montoro-Rodriguez and Small (2006) also found that job satisfaction of NAs was influenced by hours of in-service training they received. Similarly, Ejaz et al. (2008) reported that NAs who perceived they had better on-the-job training in terms of the usefulness of continuing education and job orientation had higher job satisfaction. Furthermore, Castle et al. (2007) identified satisfaction with training and skill development opportunities predicted intent to leave and actual turnover among NAs.

Rewards

Pay and benefits have been identified as significant sources of job satisfaction. Ejaz, et al. (2008) examined factors affecting job satisfaction of 644 direct care workers in randomly selected 27 nursing homes, 14 assisted living facilities, and 8 home care agencies. Of all participants, nursing home employees represented 58.6% ($n = 432$). A survey instrument was designed to question job satisfaction, background characteristics, personal stressors, job-related stressors, and job-related support. The job satisfaction scale consisted of 16 items and measured satisfaction with various aspects of work, including working conditions, perceived recognition, the amount of responsibility, and job security. The result of a multiple regression analysis showed higher job satisfaction among care workers who perceived being fairly compensated for their job, had a retirement/pension plan, and had paid health insurance. Further, care workers

employed in organizations offering a higher minimum-starting rate of pay were more satisfied with their jobs.

Several studies have also reported the association between wages and turnover. Kash, Castle, Naufal, and Hawes (2006) investigated the effects of facility and market-level characteristics on staffing levels and turnover rates in 1,014 Texas nursing homes. Data from the Medicaid nursing facility cost report were used to obtain information on facility characteristics such as profit status, number of beds, occupancy rate, and hourly wages for nurses and NAs. The results of ordinary least squares regression analyses indicated that wages were negatively associated with NA turnover, that is, higher wages were associated with reduced NA turnover.

Castle et al. (2007) found that satisfaction with salaries influenced intent to leave and actual turnover among NAs employed in nursing homes. A total of 1,779 NAs from 72 randomly selected nursing homes in five states participated in the study. The overall response rate was 62%. A survey instrument was developed to measure satisfaction with seven dimensions: (a) coworkers, (b) workplace support, (c) work content, (d) work schedule, (e) training, (f) rewards, and (g) quality of care. Scores from the seven subscales were summed to obtain the overall job satisfaction score. In addition, turnover intention was measured using a scale developed by Mobley, Horner, and Hollingsworth (1978). The scale addressed three phases of the turnover process: thinking about leaving, thinking about job searching, and searching for a job. Actual turnover data after one year were collected through a follow-up survey to NAs who had responded at baseline. The results of ordered multinomial logistic regression analysis indicated high scores on the rewards subscale and predicted less likelihood of thinking about leaving, thinking about job search, searching for a job, and turnover. Thus, NAs who perceived that they were paid fairly and received chances for further advancement were more likely to stay on their

job.

Similarly, using a sample of 255 NAs in 15 nursing homes, Bishop and colleagues (2008) found satisfaction with wages, benefits, and promotion possibilities was associated with intent to stay on the job. The response rate was 96%. Researchers developed a nursing assistant survey to measure workplace relationships, job satisfaction, and resident care. The 82 item survey addressed six areas: (a) personal characteristics, (b) satisfaction with tangible job rewards, including wages, benefits, and promotion possibilities, (c) perceived respect from supervisors, (d) job autonomy, (e) teamwork, and (f) basic supervision. In addition, NA intent to stay was measured by a single question, “Do you plan to leave your current job?” Results of a logistic regression analysis indicated that satisfaction with tangible rewards was related to NAs’ intent to stay once personal characteristics were accounted for.

Decker et al. (2009) used the NNAS data to examine the effects of extrinsic job factors (i.e., assessment of supervisor behavior, pay satisfaction, employee benefits) and personal characteristics on intrinsic job satisfaction, overall satisfaction, and intention to leave the job among NAs. The study only focused on NAs who worked 30 or more hours per week ($n = 2,146$). Regression models showed that pay satisfaction was associated with all three dependent variables while availability of health insurance and paid sick leave were only related to intention to leave. In addition, paid holidays were associated with intrinsic satisfaction and overall satisfaction, but not with intent to leave.

Another study in which NNAS data were used found that hourly wage and paid time off for vacation and personal days were related to intent to leave and job search behavior (Sterns & D’Arcy, 2009). Using data from a subsample ($n = 2,328$), researchers investigated the effects of

job characteristics (i.e., supervisor quality, training, and benefits), facility and area characteristics, and personal and sociodemographic characteristics on facility retention (i.e., whether NAs expected to leave the current job within one year and whether they were also searching for a new job) and profession retention (i.e., whether NAs did not expect their next job to be as a NA). In this study, paid time off for holidays and sick days and availability of health insurance were not related to any of the dependent variables.

Quality of Care

Related to organizational practices, it is important for NAs to feel that the facility where they work strives to provide quality care. Karsh and colleagues (2005) examined whether job characteristics, work environment, participation in quality improvement activities, and facility quality improvement environment predicted commitment, job satisfaction, and turnover intention. Data were collected from a total of 6,584 employees at all levels, including 2,221 NAs from 76 nursing homes in a Midwestern state. The response rate was 44%. A self-administered survey questionnaire included 103 items addressing four major areas: (a) demographic and job characteristics (e.g., role conflict, role ambiguity, feedback received from others), (b) work environment (e.g., task orientation, work pressure, task clarity), (c) organization's quality improvement activities, and (d) quality in the nursing facility.

Specifically, the measure of organizational quality environment consisted of items that assessed the degree to which the organization rewarded quality, provided time for improvement, provided training, demonstrated cooperation and teamwork, and followed up on new ideas and suggestions. Quality in the nursing facility was measured by a single item asking how caring the respondents perceived their facility to be. Intrinsic and extrinsic job satisfaction were measured using the Minnesota Satisfaction Questionnaire (MSQ). Measures of organizational identification

(e.g., being part of the nursing facility) and organizational involvement (e.g., making an effort for the facility) were used to assess commitment. In addition, turnover intention was measured asking respondents if they were planning to leave the facility in the near future. The results of the hierarchical multiple regression analyses indicated that, after controlling for demographic variables and other work environment and job characteristics variables, organizational quality environment had the strongest relationship with commitment, intrinsic job satisfaction, and extrinsic job satisfaction. In addition, perceptions of quality in the nursing facility significantly predicted all three outcomes.

Castle, Degenholtz, and Rosen (2006) also reported that the perceived quality of care was related to job satisfaction of caregivers in two nursing homes in Pennsylvania. Researchers examined the effects of the perceived quality and demographic factors on satisfaction with work (i.e., attachment to the facility, positive feeling toward the job and coworkers), pay, and management (i.e., opportunities for getting promotion). A total of 251 nurses and NAs participated in the study. The Job Description Index (JDI) was used to measure job satisfaction. Perceived quality of care was assessed by a question asking whether respondents would recommend the nursing home for a relative or friend. Regression analyses showed that caregiver's perception of the quality of care was associated with all three domains of job satisfaction.

According to Lerner & Resnick (2011), the client relationship, doing a complete job for a client or a group of clients inside or outside the organization, is the most frequent source of satisfaction with the work itself in service jobs and is central to motivation and job satisfaction. Pfefferle & Weinberg (2008) also suggested a sense of reward of helping others can lead to less psychological distress, and improved emotional well-being and physical health. In the follow-up

qualitative interviews conducted by Tyler et al. (2006), NAs expressed the significance of interactions with residents as a source of intrinsic feedback. Through the interactions, NAs were able to see the results of their work, such as improved health or resident quality of life. Receiving appreciation from residents also gave them a sense of pride and meaning in their work.

Similarly, Parsons and colleagues (2003) found that satisfaction with social rewards (i.e., making a difference in the lives of the residents and feeling close to residents and being needed) was related to overall job satisfaction among NAs. Brannon et al. (2007) also found that NAs who perceived helping others, being needed, and making a differences in others' lives as the rewarding aspects of work were more likely to stay in the job. Being able to provide quality care was an important factor that also influences NA turnover.

Castle and colleagues (2007) found that NAs satisfaction with the quality of care they provide and the impact they have on residents' lives was related to job search behavior and actual turnover. In Anderson and colleagues' study (2004), greater NA hours per resident day was related to lower NA turnover. Researchers suggested that when NA hours/resident day was higher, the NA was more likely to feel greater satisfaction in being able to take time to do a good job and to spend time with residents.

Job Satisfaction Instrument for Nursing Assistants

One of the issues that influence the investigation of job satisfaction in NAs working in hospitals was the lack of appropriate measurement tools. Castle and colleagues (2010) were interested in job satisfaction of NAs working in long-term care facilities and the relationship to the high turnover rate. NAs provide the majority of care (80-90%) to residents in long-term care facilities. It was determined by the researchers that there was no job satisfaction instrument

developed specifically for use with NAs found in the literature. In response to this issue, the nursing home certified nurse assistant job satisfaction questionnaire (NH-CNA-JSQ) was developed. The properties of the instrument were examined during development and proved to be psychometrically sound.

Using the NH-CNA-JSQ developed for use among NAs in long-term care settings and a previously validated measure of turnover, Castle et al (2007) conducted a study with NAs employed in a nursing home using a large sample (n = 1779) in 5 states. This study examined relationships between job satisfaction, intent to leave, and actual turnover after one year, controlling for personal, facility characteristics, and other employment opportunities. Significant relationships of overall job satisfaction and job satisfaction subscales (e.g., work schedule and training) to intent to leave and actual turnover were found (Castle et al., 2007). These results were consistent with the findings of nursing home staff (RNs, CNAs, social workers, and others) (Kiyak et al., 1997) and RN turnover studies in other health care settings (Alexander, Lichtenstein, Oh, & Ullman, 1998; Hayes et al., 2006; Wagner, 2007). This well-designed study provided a further understanding as to how NAs job satisfaction is related to intent to leave and actual turnover, despite some limitations including being a cross-sectional study, having a low facility participation rate, the response set bias of the job satisfaction measure, and small effect size. The use of this instrument has been limited to NAs working in a nursing home. Studies using this instrument with NAs working in a hospital facility were not found.

Summary

Nursing assistants play a key role as a member of the health care team by providing direct patient care and emotional and physical support for patients. This review of the literature

supports the strong association between job satisfaction and intent to leave in NAs working in nursing homes. Factors that were identified from this review of the literature related to job satisfaction and intent to leave were positive supervisor and co-worker support, opportunities for professional advancement, quality of care, lighter workloads, pay, length of employment, and personal characteristics. Research related to job satisfaction and intent to leave has not been conducted with NAs working in hospitals. Therefore, this study examined the personal characteristics, role-related characteristics and job characteristics of NAs that work in hospitals. Additionally this study explored the relationships among personal characteristics, role-related characteristics, job characteristics, job satisfaction and intent to leave among NAs that work in hospitals. Despite the support for the use of the Nursing Home Nurse Aide Job Satisfaction Questionnaire (NH-CNA-JSQ) with NAs in nursing homes, this questionnaire has not been used with NAs that work in the hospital (Castle et al. 2007). This study utilized an adapted version of the NH-CNA-JSQ to NAs working in a hospital setting.

CHAPTER 3: METHODOLOGY

The purpose of this chapter is to describe the research methodology used to address the following research question:

1. What are the personal characteristics, role-related characteristics, facility characteristics, and job characteristics of nursing assistants that work in hospitals?
2. What are the psychometric properties, job satisfaction scores, and intent to leave scores on the Job Satisfaction Measure and Intent to Leave Measure?
3. What is the relationship between personal characteristics, role-related characteristics, and job satisfaction on intent to leave of nursing assistants that work in hospitals?
4. Which combination of factors (personal characteristics, role-related characteristics, job satisfaction) are the best predictors of job satisfaction and intent to leave in nursing assistants that work in hospitals?

Research Design

A descriptive correlational survey design was used to examine the relationships between job satisfaction and intent to leave of nursing assistants that work in hospitals. In addition, the influence of personal characteristics, role related characteristics and job characteristics were examined. The descriptive correlational survey design allows for the examination of relationships between 2 or more variables and to determine whether a relationship exists (Polit & Beck (2011).

Sample

Participants for this study are a convenience sample of NAs that hold a current NAI listing with the North Carolina Division of Health Service Regulation Registry (DHSR) and or a NAII listing with the North Carolina Board of Nursing (NCBON). The criteria for inclusion

include current listing as an NAI or NAII in the state of North Carolina and working in a hospital setting and work at least 20 hours. The exclusion criteria include NAI or NAII that work in other healthcare facilities. Currently there are 120,000 NAIs listed with DHSR (DHSR, 2014). The total number of NAIs that work in the hospital is unknown at this time. The current total numbers of NAIIs that are listed working in a hospital setting are 5,770 (NCBON, 2014).

Anyone seeking to be listed on the North Carolina NAI Registry, including NAs from other states must first pass a North Carolina Board of Nursing state-approved NA training and competency evaluation program or state approved competency evaluation program. The state-approved vendor for NAI competency exams sends the names of successful test candidates to the Health Care Personnel Registry Section (HCPRS) for listing on the NAI Registry (DHSR, 2014). The HCPRS lists these individuals on the NAI Registry, notifies them of the listing, and provides them with the requirements and responsibilities for maintaining registry listing. The listing is valid for two years.

To maintain registry listing, the individual must work as an NAI under Registered Nurse (RN) supervision for pay for at least 8 hours within the two-year period. When a listing is about to expire, the HCPRS notifies the eligible NAI in writing, as long as the NA listing is in good standing and a current address is on file. The notification includes an employment verification form. The NAI has a RN supervisor document his/her NAI employment on the form and sends the completed form to the HCPRS. Upon receipt of valid employment information, the HCPRS extends the listing for two years from the last valid date worked. An NAI may continue to re-list by working and reporting their work as stated above. Re-testing is required, however, if the nurse aide goes for a period of two full years (from either the most recent date tested or the most recent date worked) without meeting the minimum work requirement (DHSR, 2014). The NAI will be

listed in 2 to 4 business days after completing the examination. The DHSR also approves Educational Programs for the NAI and develops the curriculum for the NA1 (DHSR, 2014). Data included in the listing process are name, date of birth, listing number, social security number, home address, work address, email address, home phone numbers, and work phone number. All data is kept in a database on a server at the DHSR (DHSR, 2014). Emails were provided to the researcher from the database at DHSR.

Anyone seeking to be listed on the North Carolina NAII Registry must be listed as a NAI on the HCPRS with no substantial findings of abuse, neglect or misappropriation of property (NCBON, 2014). The individual must have successfully completed a North Carolina Board of Nursing approved NAII program. The NCBON approves the NAII Educational Programs and develops the curriculum for the NAII training. An online application for initial listing must be completed within 30 business days following completion of an NAII program. An RN or LPN nursing student seeking NAII listing, must send the application within 30 business days following completion of course work equivalent to NAII requirements. The NAII Program Completion Verification must be completed online by the RN NAII instructor for students of a NAII program or the Nursing Program Director for nursing students currently enrolled in Board of Nursing approved Nursing Program.

For renewal of the NAII listing, the NAII must have performed NA activities for monetary compensation within the past 24 months for at least 8 hours under the direct supervision of an RN. The RN supervisor must verify the 8 hours of employment by completing the online NAII Employment verification. The NCBON submits renewal postcard reminders by mail 90 days prior to the expiration date. The cost for initial or renewal listing is \$24.00. Data included in the listing process are name, date of birth, social security number, home address,

employment setting, email address, home and work phone numbers. All data is kept in a database on a server at the NCBON (NCBON, 2014). The NCBON provided emails to the researcher for the NAI from the secured database.

The questionnaire was sent via email to NAI and NAI's. It was recommended by each of the agencies to use NAI's and NAI's that have recently registered or renewed in the past 6-12 months since the emails would be updated. Follow-up contacts have been consistently reported as being the most powerful technique for increasing response rates, both in mail and online surveys. In order to increase the response rate of the questionnaire, Dillman et al. (2009) suggest sending multiple contacts during the period that the questionnaire is available. It is also recommended that once the questionnaire is sent out, it should be monitored daily for completion rates (Dillman et al., 2009). While the optimum time for online questionnaire responses has not been determined, results seem to arrive within 14 days of implementation (Dillman et al., 2009). In one study (Deutskens, Ruyter, Wetzels, & Oosterveld, 2004), 20% of the results arrived within 6.6 days and in another study (Bosnjak & Tuten, 2003), the response rate varied between 4.34 and 6.53 days, depending upon the incentive offered. Dillman (2009) suggests the use of a three-contact strategy with a participant. The first email is the introduction to the questionnaire and why their response is important, along with providing important information regarding the research study and how to complete the questionnaire. The second email serves as a thank you to those who have completed the survey and a reminder to those that have not with a link to the questionnaire. The third email served as a reminder of the short amount of time left to complete the survey and the importance of responding. Sending the follow-up contacts right after the majority of respondents have reacted to the initial email has been identified as essential for

maximizing the response rate (Dillman, 2009). Since NAIIs also need to be current with the NAI listing, duplicate email addresses were excluded from the list.

Instrumentation

Job Satisfaction

Job satisfaction is defined as “the favorableness or unfavorableness with which employee view their work” (Grieshaber, Parker, & Deering, 1995, p.18). The concept was operationalized by a modified version of the nursing home certified nurse assistant job satisfaction questionnaire (NH-CNA-JSQ). The modified questionnaire is identified as the Hospital Nursing Assistant Job Satisfaction Questionnaire (HNA-JSQ). The original instrument was developed to assess the job satisfaction of nursing assistants that work exclusively in nursing homes. Studies that examined job satisfaction of nursing home NAs were few and it was determined that examining job satisfaction of NAs working in nursing homes was necessary since the turnover rate was very high (Castle et al., 2007). There were no specific instruments located by the researchers that examined NA job satisfaction in nursing homes. Therefore, Castle et al. (2007) developed the NH-CNA-JSQ specifically for use with NAs that worked in nursing homes. For this study, the NH-CAN-JSQ has been modified to administer to hospital nursing assistants.

The HNA-JSQ has 19 questions with seven subscales. The seven subscales include coworkers, workplace support, work content, work schedule, training, rewards and quality of care. *Coworkers* represent the relations with other workers in the facility. *Workplace Support* represents resources and demands of the job as an NA. *Work Content* represents the complexity and challenge of the work as an NA. *Work Schedule* represents the time pressure of the job. *Training* represents preparation for the position. *Rewards* represent the benefits of the job. *Quality of Care* represents how well the NA perceives that patients are being cared for. There are

also two questions about global satisfaction. All of the questions in the original questionnaire utilized a visual analog rating scale. For the HNA-JSQ, a bipolar scale that measures both the direction and intensity of job satisfaction was used. Scoring is based on a 7 point scale with 1 being “strongly dissatisfied” and 7 being “ Very satisfied”. The measure for job satisfaction was analyzed using the global job satisfaction means. Intent to leave measure was analyzed using the question “I intend to quit”.

In addition to the seven subscales, questions about personal characteristics, role-related characteristics, facility characteristics, and job related characteristics were added by this researcher. The personal characteristic variables included in the adapted version are age, race, gender, and education. Age was measured as a continuous variable. Race was measured by responses that range from African American to Caucasian. There is also an “other” choice where the subject would include the race that is not included. Gender was measured as a binary variable with choice of male or female. Education was measured with choices that range from high school diploma to doctorate degree. The role-related characteristic variables include job title (choices include NAI or NAII), how long they have been an NA (choices include less than one year to greater than 20 years), what shift they work (choices include day, evening, or “other”), how many hours a week they work (choices from full time, part time), and how long they have been working at the hospital (choices include less than 1 year to greater than 20 years). For facility characteristics, the researcher collected the information of hospital size, teaching hospital, and magnet status. The job characteristic variables include the name of the hospital where they work (subjects enter the name of the hospital) and the unit that they work on as an NA (choices include medical/surgical to psychiatric unit). If there is an “other” choice, the subject can enter the information not contained in the choices.

Development and Psychometric Properties of the original NH-CNA -JSQ

The development of the original NH-CNA-JSQ began with in-depth interview of 35 NAs from 10 different nursing homes that included open-ended questions about specific areas of their jobs that they believed were the most and least important, and gave them the most and least satisfaction. The responses were then transcribed and 15 themes were identified using content analysis (Castle, 2010). Another survey was then mailed to 135 NAs to rate the top five areas. Subscales scores were averaged and seven areas of job satisfaction had the highest scores. Each of the seven subscales were labeled and defined by the researchers. As far as item development, the researchers examined questions from seven previously published job satisfaction instruments (Castle, 2007). Items that appeared to fit the seven subscales were included. A team of experts and practitioners then were asked to review the questions and chose three for each subscale that they thought best captured the definition of the subscale. The top five questions in each subscale were then chosen. A visual analog format for item response was chosen for use to prevent response bias (Castle & Engberg, 2004). Cognitive testing was then used to identify any problems with questions. Only a few changes were made to the final instrument.

Nursing assistants from 22 nursing homes were then mailed the instrument with a response rate of 66%. The factor analysis demonstrated that all items were representative of the factors for the seven subscales. The item-scale internal consistency analysis determined that the correlation of items within the index were higher than those with other indexes. Criterion validity was high (0.77) and Chronbach's alpha for the domains ranged from 0.72-0.83 (Castle, 2010). Also the percentage of NA's not responding to each question was low (<15%). The researchers concluded that the questionnaire would provide a sound instrument to use with NAs working in nursing homes to measure job satisfaction and intent to leave.

Piloting the Instrument

The NH-CNA-JSQ has only been used with nursing home NAs in one study (Castle , 2010). Since this instrument has not been used with NAs that work in the hospital setting, the instrument was piloted with a group of hospital NAs and staff nurses before being used in this study. It is important to determine whether the NAs fully understand and agree with the content of the questionnaire. A sample of nurses who work with NAs in the hospital setting were also invited to review the questionnaire for content validity to determine if the tool measured the actual role of the NA in the hospital setting. Five NAs working on a general-medical unit at a local hospital and five nurses from the same unit agreed to review the questionnaire. All of the respondents were asked to view the computer version of the questionnaire since the questionnaire was given in this format and has only previously been administered via pencil and paper. It has been recommended by Dillman, Smyth, & Christian (2009) that if a survey is administered electronically, the functionality of the software must also be assessed. Observing the participants while they complete the online questionnaire is one way to determine how the online tool functions (Dillman et al., 2009). All participants were asked to inform the researcher if they had any questions or were unclear about any of the information or if they had any suggestions/recommendations to improve the questionnaire. The researcher took notes on the participants' responses and also recorded the amount of time that it took to complete the questionnaire.

All of the participants found that the interface of the questionnaire was easy to use. All of the participants were able to move about the questionnaire without any concerns. The mean amount of time to take the questionnaire was 12 minutes (range 8-16 minutes), which included discussion time of the participants' feedback. Eight of the participants asked questions and made

suggestions about the format of the visual analog scale. It was unclear to them as to what it meant as far as ranges for satisfaction. All participants suggested using a scale that was labeled for each of the choices from not satisfied to very satisfied and fewer choices. Two of the participants did not make a suggestion about format of the visual analog scales. Dillman et al., (2009), recommends that for bipolar scales that measure both the direction and the intensity of the construct, the optimal number of response categories should be either five or seven. This allowed for two to three levels of differentiation on either side of the middle or neutral category. For this instrument, seven responses of satisfaction were used. One of the questions was unclear as to the “training you have had to do your job”. Nine of the participants were not sure if this meant “on the job training” or “past training”. This question was changed to read, “The training you have had at your current job” which all of the participants agreed was much clearer to understand. All of the participants felt the question “The effect you have on the care of patients” was unclear and difficult to answer using satisfaction as an answer. Also they felt that this question was similar to a previous question that asked about how they felt about the care that they give patients. Four of the participants suggested adding, “general-medical unit, palliative care unit, and mental health unit” to the list of units on which the NAs work. All of the participants suggested removing “months” from the choices of “How long have you been working at your current hospital, how long have you been a nursing assistant, and how long have you been working on your current unit”. Most of the respondents stated that they could not remember the months.

In the last section “Intent to leave”, all of the participants recommended changing the answer choices to “yes” or “no” since they were not able to answer them with “not satisfied versus satisfied”. All participants also felt that there were two questions that were asking the

same question, “I would like to find a comparable job in a different hospital” and “It is likely that I will actively look for a different organization to work for in the coming year”. All of the participants liked having the last three open-ended questions so that they could add information about how they felt about their job that may not be asked on the questionnaire.

Once the evaluation session ended, each participant was asked if they thought that an incentive would increase the response rate for NAs to complete the survey. All of the participants agreed that some type of incentive should be offered. Eight of the participants suggested a drawing of several gift cards. Two of the participants suggested each subject receive some type of gift card.

Intent to leave

Intent to leave is represented in this study as a progression of three phases: thinking about leaving, thinking about searching for a job, and searching for the job (Castle, 2010). The intent to leave by the NA increases for each phase. Price (1977) suggested that expressed "intention to leave" might represent the next logical step after experienced dissatisfaction in the withdrawal process. The withdrawal decision phase presented here suggests that thinking of quitting is the next logical step after experienced dissatisfaction and that "intention to leave," following several other steps, may be the last step prior to actual quitting. Intent to leave is a self-reported measure, using a scale developed by Mobley, Horner, and Hollingsworth (1978). There are seven items that use a 5-point Likert scale, with 1 being “strongly agree” to 5 “strongly disagree”. One question was added to the intent to leave measure. The question “At the present time I am actively planning to return to school” uses the same 5 point Likert scale. All of the questions can be viewed in Table 1.

Table 1

Hospital Nursing Assistant Job Satisfaction Questionnaire Questions

Job Satisfaction

Coworkers

- Rate the people you work with
- Rate whether you feel part of a team effort
- Rate cooperation among staff

Workplace support

- Rate the support you get when doing your job
- Rate the chances you have to talk about your concerns
- Rate the demands patients and families place on you

Work content

- Rate how much you enjoy working with patients
- Rate how your role influences the lives of patients
- Rate your closeness to patients and families

Work schedule

- Rate your workload
- Rate your work schedule
- Rate the amount of time that you have to do your job

Training

- Rate whether your skills are adequate for the job
- Rate the training you have had to perform your job
- Rate the chances that you have for more training

Rewards

- Rate how fairly you are paid
- Rate your chances for further advancement

Quality of care

- Rate the care given to patients
- Rate the impact you have on patients' lives

Global ratings

- Rate your overall satisfaction with your job
- Would you recommend working at this hospital to a friend?

Table 1 (continues)

Intent to Leave

Thinking about leaving

All things considered, I would like to find a comparable job in a different organization

I am thinking about quitting

Thinking about the job search

It is likely that I will actively look for a different organization to work for in the next year

I will probably look for a new job in the near future

Searching for a job

The results of my search for a new job are encouraging

At the present time, I am actively searching for a job in another organization

I intent to quit

Data Collection Plan

Data was collected using an online questionnaire. The software for developing the online questionnaire was QualtricsTM. *QualtricsTM* is a research based online survey software package available to East Carolina University students and faculty (ECU, n.d.) and allows the user to develop, send and analyze the results of the data or import the data into the *Statistical Package for Social Sciences (SPSS ®)*(*QualtricsTM*, n.d.). According to the recommendations of Dillman et al. (2009), the email included an appeal for assistance, why NA's were selected, the questionnaire link and how to access it, the confidentiality and voluntary nature of the questionnaire, the researcher's contact information, an advance thank you and the significance and importance of the questionnaire to the role of the NA in the hospital setting. Additionally, the email notification contained the deadline date for the questionnaires completion, the incentive for participation and how the study contributes to the science of nursing. While the optimum time for online survey responses has not been determined, results seem to arrive within 14 days of implantation (Dillman et al., 2009).

While the use of incentives to increase response rates in mail surveys has been clearly studied, the format for giving incentives for web-based surveys has not been established (Dillman et al., 2009). Different theoretical approaches have attempted to provide an explanation as to why the use of different types of incentives can improve Web survey results. The Theory of Economic Exchange suggests that respondents complete and return the survey in exchange for financial compensation, rather than any benefits their action might have for society (Tuten, Galesic, & Bosnjak, 2004). When a drawing is involved, the expected benefits are not solely determined by the amount of money the incentive offers, but also by the probability of winning. It is recommended that the respondents are informed of when they receive the results of the prize drawing immediately after completing the survey (Tuten et al., 2004). Moreover, Heerwegh and Loosveldt (2009), following the approach of the Theory of Planned Behavior, postulate that offering a post-paid incentive links the behavior of completing a survey with a positive outcome, which is a behavioral belief that should positively affect the attitude towards the behavior.

Bosnjak & Tuten, (2003) conducted an experimental study to examine if there were any differences in offering a prepaid incentive (give the money when they receive the survey), a promised incentive (give the money after they complete the survey), a prize drawing incentive (upon completion of the survey participate in a drawing) and no incentive. The results indicate that prepaid incentives in web surveys seem to have no advantages concerning the willingness to participate, actual participation (completion rates), and the share of incomplete response patterns compared with promised incentives. Furthermore, promised incentives showed no advantages over no incentives. Prize drawings significantly increased the willingness to participate and also increased actual participation (completion rates). The prize drawings also reduced the number of incompletes compared to no incentives. For this study, four \$50.00 gift cards were awarded via a

drawing. Once the subject completed the questionnaire, they had the opportunity to go to another link and submit their name and contact information.

Protection of Human Subjects

The study proposal was approved by the Institutional Review Board of East Carolina University. The email notification informed participants that completion of the questionnaire is voluntary and anonymous and that there will be no risk associated with participation in the study. Once the participant clicks on the link to enter the questionnaire, the first screen provided more specific information about the questionnaire. Clicking on the link served as consent for the individual's participation in the study.

Data Analysis Plan

The data was exported from *Qualtrics™* to the *Statistical Package for Statistical Analysis (SPSS®)* for analysis. All study variables were analyzed for missing data. Descriptive analyses for each variable were conducted including mean, standard deviation, and actual range. The item-scale internal consistency was determined using Cronbach's alpha for each subscale. Diagnostic tests for violations of assumptions for statistical analyses, such as normality, linearity, homoscedasticity, and multicollinearity were completed and no violations were noted. Significance level was set at a p value of $< .05$.

Correlation analysis was conducted to examine the relationships between personal characteristics, role-related characteristics and job satisfaction on intent to leave. Independent - sample t -tests was conducted to compare the difference between intent to leave and selected personal and role-related characteristics. Multiple regression analysis was conducted to examine the factors that predict job satisfaction and intent to leave in hospital NAs. The open-ended

response option for what they like about their jobs, what they like least about their job, and any suggestions about how to improve the work environment was reviewed and reported.

Summary

This chapter describes the methodology that guided this research study and describes the instrument that was adapted for use with NAs that work in the hospital setting. A descriptive correlational design was used, with a convenience sample of NAI and NAIIs who are registered in the state of North Carolina. The plan for data collection and analysis has also been described. Findings from this study may help nurse managers and administrators to better understand how to reduce the turnover among NAs. Job dissatisfaction is reported to be strongly associated with nursing staff turnover and intent to leave thus highlighting the importance of understanding what promotes NAs job satisfaction.

CHAPTER 4: RESULTS

The purpose of this chapter is to report the findings of the study. This study examined the relationship between job satisfaction and intent to leave in the hospital based NAs in North Carolina. Personal characteristics, role-related characteristics, job characteristics and facility characteristics of hospital NAs are presented. Analysis of each research question is included.

Characteristics of the Sample

The target population for this study was all NAs working in a hospital in the state of North Carolina. The accessible population was 4,318 NAs that were sent a link to the questionnaire. There were a total of 265 returned emails. A total sample of 887 NAs responded to the questionnaire with a total sample of 628 that completed all of the questions. Only 12 NAs responded so it was decided to not use them in the sample. The response rate for returned surveys was 22% and 16% for surveys that were complete. A total of 72 hospitals were represented in the sample.

Research Question #1

What are the personal characteristics, role-related characteristics, facility characteristics, and job characteristics of nursing assistants that work in hospitals?

Personal characteristics were defined as age, gender, race/ethnicity, and educational level. Study participants personal characteristics are summarized in Table 1. The ages of the participants ranged from 18-66 years ($M=41$, $SD=11.8$ years). The study sample was predominantly female (89.6%), Caucasian (52.5%), and high school graduates (54.4%).

Role-related characteristics were defined as job title, work shift, hours/week worked, length of employment at current hospital, length of employment as an NA, and type of unit for current position. Study participants role-related characteristics are summarized in Table 2.

Table 2

Personal Characteristics of Participants (N = 628)

Characteristic	n	%
Age		
18-25	75	12.4
26-35	148	22.8
36-45	153	23.6
46-55	172	28.0
>55	80	13.2
Gender		
Female	559	89.0
Male	69	11.0
Race/Ethnicity		
Caucasian	334	52.5
African American	241	37.5
Hispanic	19	3.0
Other	34	7.0
Highest education level completed		
High school	348	54.4
Associate degree	157	25.6
GED	55	8.8
Baccalaureate degree	55	8.7
Masters degree	14	2.4
Doctorate degree	1	0.2
Currently enrolled in college		
Yes	226	35.8
No	402	64.1
Type of degree awarded at graduation		
Certificate	7	5.1
Diploma	6	4.4
Associate degree	76	55.9
Bachelor's degree	41	30.1
Masters degree	3	2.2
Other	3	2.2

Table 3

Role-related Characteristics of Participants (N = 628)

Characteristic	n	%
Shift currently work		
700am-700pm	272	43.6
700pm-700am	169	26.7
Other	187	29.7
Weekly hours worked		
Full time 40 hours	464	73.9
Part time 20-40 hours	164	26.1
Years work at current hospital		
Less than 1 year	66	10.5
1-5 years	269	43.3
6-10 years	132	21.3
> 11 years	161	34.9
Years work as an NA		
Less than 1 year	14	2.1
1-5 years	181	28.4
6-10 years	145	23.6
11-20 years	288	45.9
Type of work unit		
Medical/Surgical	202	31.9
Emergency Department	149	23.8
Intensive Care Unit	74	11.7
Intermediate Care Unit	57	9.1
Oncology Unit	53	8.2
General Medicine	49	7.7
Psych Unit	45	7.1
Rehabilitation Unit	43	6.8
Obstetrics	36	5.7
Pediatric Unit	28	4.4
Pallative Care	14	2.2
Other	136	21.5

The majority of participants enrolled in college (35.8%) are pursuing an associate degree (55.9%). The study participants predominantly work a 700am-700pm shift (43.6%), fulltime (73.9%), and have been working at the current hospital for 1-5 years (43.3%). The study participants predominantly have been in the role as a NA for greater than 6 years (70%).

Facility characteristics are defined as hospital bed size, magnet status, and teaching hospital. Facility characteristics are summarized in Table 3. Only 293 respondents reported the name of the hospital where they work. There were a total of 72 hospitals reported by these study participants. The hospital bed size ranged from 6-1004 (M= 580, SD =346.5). Of the 293 participants that reported their hospital, 64% of these participants were in hospitals that have Magnet Status and 64 % were employed by academic teaching hospitals.

Table 4

Facilities Characteristics of Participants (N = 293)

Characteristics	n	%
Hospital bed size		
<100	16	5.0
101-300	79	27.2
301-600	38	13.3
601-900	70	24.2
>900	90	31.4
Magnet Status		
Yes	186	64.1
No	107	36.2
Teaching Hospital		
Yes	188	64.1
No	105	36.2

The NAII performs the same skills as the NAI but the NAII also is trained to perform more complex nursing skills. What is unknown is whether NAII are performing these complex skills. These skills include oxygen therapy, break up and removal of fecal impaction, sterile wound dressing change, assemble and flush intravenous (IV) tubing during set-up, monitoring of IV infusions, IV site care/dressing changes, discontinuing IV infusions, monitoring oral/nasogastric infusions, gastrostomy feedings, clamping feeding tubes, remove oral/nasogastric feeding tubes, suctioning of oropharyngeal/nasopharyngeal, tracheostomy care, ostomy care, irrigation of ostomy, urinary catheterization, and irrigation of urinary catheter tubing.

Table 5

NAII Advanced Skills Study Participants were Approved to Perform at Their Hospital (N=628)

Skill	n	%
Urinary catheterization	525	83.6
Sterile wound dressing change	405	64.5
Ostomy care	376	59.9
Discontinuing peripheral intravenous infusions	353	56.2
IV site care/dressing change	310	49.4
Tracheostomy care	303	48.2
Oxygen therapy	303	48.1
Break up and removal of fecal impaction	298	47.5
Assemble/flush IV tubing during set-up	265	42.2
Suctioning of oropharyngeal	228	36.3
Irrigation of urinary catheter tubing	216	34.4
Clamping feeding tubes	201	32.0
Monitoring oral/nasogastric infusions	184	29.3
Removing oral/nasogastric feeding tubes	182	29.0
Gastrostomy feedings	178	28.3
Suctioning of nasopharyngeal	173	27.5
Irrigation of ostomy	173	27.5
Monitoring IV flow rate	167	26.6

Participants were asked to identify the skills that they are approved to do at their hospital from a list of NAI advanced skills. Table 4 list the skills identified. The highest percentage of skills that were reported by the participants as having approval to complete were urinary catheterization (83.6%), sterile wound dressing change (64.5%), ostomy care (59.9%), discontinuing peripheral intravenous infusions (56.2%), and intravenous site care/dressing change (49.4%). The lowest percentage of skills that were reported by the participants as having approval to complete were monitoring intravenous flow rates (26.6%), irrigation of an ostomy (27.5), suctioning of nasopharyngeal suctioning (27.5), and gastrostomy feedings (28.3%).

Research Question # 2

What are the psychometrics properties, job satisfaction scores, and intent to leave scores on the Job Satisfaction Measure and Intent to Leave Measure?

Job Satisfaction Measure

In this analysis, the HNA-JSQ was used to measure job satisfaction. Table 5 shows the internal consistency reliability for the 19 item total job satisfaction measure and associated subscales. Means and standard deviations are presented for the total measure, subscales, and individual subscale items and single item measures. All coefficient alphas are above .70 for the total job satisfaction measure and satisfaction subscales. The mean total score for global job satisfaction was 4.61 with scores ranging from 2 to 7 on the seven-point Likert scale.

For the job satisfaction measure, the mean score for the Work Content subscale was the highest (M=6.5), followed by scores for Coworkers (M=4.4), Work Place Support (M=4.2) and Work Schedule (M=3.76).

Table 6

Job Satisfaction Scores and Coefficient Alphas for the Study Sample (N=628)

Item/Subscale	alpha	Scale/subscale		Item		Response range
		M	SD	M	SD	
Mean job satisfaction	.87	4.99	0.91			2-7
Coworkers	.78	4.41	1.51			1-7
People you work with				4.61	1.80	1-7
Feel part of a team				4.18	1.90	1-7
Cooperation among staff				4.44	1.73	1-7
Workplace support	.73	4.21	1.77			1-7
Support when doing job				4.39	1.90	1-7
Talk about concerns				4.04	2.10	1-7
Work content	.78	6.50	0.79			
Working with patients				6.57	0.87	1-7
Role influences patient health				6.37	1.03	1-7
Relationship with patients				6.50	0.95	1-7
Work schedule	.72	3.76	1.72			1-7
Workload				3.46	1.94	1-7
Time to do job				4.07	1.95	1-7
Global rating						
General job satisfaction				4.61	1.85	1-7
Recommend hospital				0.84	0.37	0-1
Single item measures						
Demands from patients				5.64	1.42	1-7
Work schedule				5.89	1.55	1-7
Skills to do job				6.14	1.07	1-7
Pay				3.25	1.80	1-7
Advancement chances				3.58	2.05	1-7
Care given to patients				6.15	1.23	1-7
Affect on patients				6.50	0.93	1-7
On the job training				4.80	1.77	1-7
Chances for more training				4.35	1.85	1-7

Upon analysis of the Cronbach alphas for each of the individual subscales, three of the subscales had a Cronbach alpha coefficient less than the recommended of .7 (Pallant, 2013). The three subscales were Training (Cronbach alpha = .62), Rewards (Cronbach alpha = .60), and Quality of Care (Cronbach alpha = .57). It was decided to treat these subscales as individual items. Two of the subscales Workplace Support and Work Schedule also were revised removing one item from each scale and treating it as a single item.

Table 7

Intent to Leave Scores and Coefficient Alphas for the Study Sample (N=628)

Item/Subscale	alpha	<u>Scale/subscale</u>		<u>Item</u>		Response range
		M	SD	M	SD	
Mean intent to leave	.86	3.67	0.98			1-5
Thinking about leaving	.69	3.71	1.08			1-5
Find another job				3.54	1.30	1-5
Thinking about quitting				3.90	1.17	1-5
Thinking about job search	.80	3.43	1.16			1-5
I will actively look for a job				3.61	1.22	1-5
I will probably look for a job				3.26	1.32	1-5
Searching for a job	.81	3.80	1.01			1-5
Results of search encouraging				3.64	1.20	1-5
Actively searching for a job				3.80	1.23	1-5
I intend to quit				3.98	1.12	1-5

Intent to Leave Measure

The internal consistency reliability for the seven item intent to leave measure, and means and standard deviations for total measure, subscales, and individual intent to leave items are displayed in Table 6. The thinking about leaving subscale had the lowest coefficient alpha (.69) while the other two intent to leave subscales had coefficient alphas of .80 and .81. The mean total score for intent to leave was 3.67 with scores ranging from 1 to 5 on the five-point Likert scale.

Research Question # 3

What is the relationship between personal characteristics, role-related characteristics, and job satisfaction on intent to leave of nursing assistants that work in hospitals?

Independent-sample-t-tests were conducted to compare the intent to leave scores for selected personal and role related characteristics (race, shift work, part time, college, education, and hospital tenure) of hospital NAs. There was a significant difference in the intent to leave based on education. Mean scores were higher for participants with a high school diploma indicating that they were more likely not to leave than participants with education beyond the high school diploma. The magnitude of the differences in the means was very small. There was a significant difference in intent to leave based on hospital tenure. Mean scores were higher for participants with hospital tenure greater than 6 years indicating that they were more likely not to leave than those with hospital tenure of less than 6 years. The magnitude of the differences in the mean scores was very small. There was no significant difference in the mean scores for race, shift, part time, and college. Refer to Table 7 for the results of the means, standard deviations, and t-test results.

The relationship between job satisfaction and intent to leave was investigated using the Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. The variables with the strongest correlation with intent to leave included workplace support subscale ($r = .33$), work schedule item ($r = .34$), patient care item ($r = .30$), and would you recommend working at this hospital to a friend item ($r = .33$). All of the correlations are positive which means that the high satisfaction scores are associated with high scores on intent to leave, indicating lower intent to leave. The satisfaction variables with the weakest relationship with intent to leave included coworkers subscale ($r = .17$), on the job training ($r = .09$), chances for more training ($r = .13$), and affect on patients item ($r = .15$). Refer to Table 8 for the intercorrelation results.

Table 8

Means, Standard Deviations, and t-Test Results for Selected Personal and Role Related Characteristics on Intent to Leave

Variable	n	M	SD	t	p	η^2
Minority						
African American	232	3.67	0.97			
Non-African American	396	3.67	0.98	.044	.96	.000
Shift						
Day	272	3.72	0.92			
Other	354	3.63	1.02	1.10	.27	.002
Part-time						
No	464	3.69	.972			
Yes	164	3.61	.988	.935	.35	.001
Attending College						
No	401	3.71	.974			
Yes	225	3.60	.981	1.27	.20	.003
Education						
High School	393	3.76	.928			
>High School	227	3.51	1.05	3.08	.002	.015
Hospital Tenure						
<6 years	335	3.53	1.04			
> 6 years	293	3.83	.867	3.84	.000	.023

Table 9

Intercorrelations Among the Job Satisfaction Variables and Intent To Leave

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Coworkers	—													
2. Workplace Support	.67	—												
3. Work Content	.12	.20	—											
4. Work Schedule	.62	.62	.26	—										
5. Pay	.35	.40	.08 ¹	.41	—									
6. Advancement	.46	.56	.08 ¹	.44	.43	—								
7. Training	.54	.56	.13	.46	.27	.47	—							
8. Patient Demands	.11	.21	.51	.29	.09 [*]	.10	.03 ¹	—						
9. Work Hours	.18	.26	.36	.51	.19	.15	.11	.32	—					
10. Additional Training	.46	.51	.12	.52	.26	.47	.50	.07 ¹	.14	—				
11. Patient Care	.24	.28	.34	.30	.17	.14	.12	.29	.23	.15	—			
12. Affect on Patients	.17	.20	.59	.19	.03 ¹	.07 ¹	.16	.31	.26	.13	.42	—		
13. Recommend to Friend	.23	.28	.11	.22	.22	.22	.15	.13	.22	.15	.22	.11	—	
14. Intent To Leave	.17	.33	.26	.24	.29	.22	.09 [*]	.21	.34	.13	.30	.15	.33	—

Note. * p < .05; ¹p > .05. All other correlations p < .01

Research Question 4

Which combination of factors (personal characteristics, role-related characteristics, job satisfaction characteristics) are the best predictors of job satisfaction and intent to leave in nursing assistants that work in hospitals?

Standard multiple regression was used to assess the ability of personal characteristics, role-related characteristics, and job satisfaction variables to predict intent to leave in NAs that work in hospitals. Preliminary analyses were conducted to ensure no violation of the assumptions of multicollinearity, normality, linearity, and homoscedasticity. This regression was based on $n = 612$ subjects with non-missing values on all of the variables. The model explains 32.3 % of the variance for intent to leave. The predictor variables that made the largest unique statistically significant contribution in explaining the variability in intent to leave were workplace support scale ($\beta = .266$), work hours ($\beta = .244$), recommend hospital to a friend ($\beta = .174$), work schedule scale ($\beta = .170$), pay ($\beta = .158$), care given to patients ($\beta = .158$), and work content scale ($\beta = .154$). Refer to Table 9 for the summary of regression analysis results.

Standard multiple regression was used to assess the ability of job satisfaction characteristics variables to predict overall job satisfaction in NAs that work in hospitals. Preliminary analyses were conducted to ensure no violation of the assumptions of multicollinearity, normality, linearity, and homoscedasticity. This regression was based on $n = 620$ subjects with non-missing values on all of the variables. The model explains 47.3% of the variance for job satisfaction. The predictor variables that made the largest unique statistically significant contribution in explaining the variability in job satisfaction were work schedule ($\beta = .353$), coworkers ($\beta = .174$), opportunities for training ($\beta = .129$), and care given to patients. Refer to Table 10 for the summary of regression analysis results.

Table 10

*Regression Analysis Summary for Role Related Variables and Job Satisfaction Variables
Predicting Intent To Leave*

Variable	B	SE B	β	t	p
Education	.138	.070	.068	1.95	.052
Hospital tenure	-.189	.069	-.096	-2.74	.006
Coworkers scale	-.027	.033	-.042	-.830	.407
Workplace support scale	.148	.030	.266	4.93	<.001
Work content scale	.189	.058	.154	3.25	.001
Work schedule scale	-.127	.042	-.170	-3.00	.003
Pay	.086	.022	.158	3.99	<.001
Advancement	.014	.021	.029	.642	.521
Training on the job	-.052	.025	-.094	-2.08	.038
Patient Demands	-.011	.028	-.015	-.371	.711
Work schedule	.155	.027	.244	5.75	<.001
Chances for more training	.003	.023	.005	.111	.912
Care given to patients	.127	.032	.158	3.98	<.001
Affect on patients	-.100	.046	-.096	-2.17	.030
Recommend to friend	.462	.097	.174	4.78	<.001

$R^2 = .32$ (N = 612, p < .001)

Table 11

Regression Analysis Summary for Job Satisfaction Characteristic Variables Predicting Overall Job Satisfaction

Variable	B	SE B	β	t	p
Hospital tenure	-0.48	.112	-.013	-.427	.670
Coworkers scale	.213	.054	.174	3.93	<.001
Workplace support scale	-.012	.049	-.012	-.246	.806
Work content scale	.096	.096	.041	1.02	.317
Work schedule scale	.380	.046	.353	8.18	<.001
Pay	.047	.036	.045	1.31	.191
Advancement	-.007	.035	-.008	-.197	.844
Training on the job	.094	.041	.090	2.29	.022
Patient Demands	.058	.047	.045	1.25	.214
Work schedule	-.015	.040	-.012	-.375	.708
Chances for more training	.129	.039	.129	3.40	.001
Care given to patients	.108	.052	.071	2.08	.038
Affect on patients	.137	.076	.069	1.80	.073

$R^2 = .47$ (N = 620, p < .001)

Nursing Assistants Responses to Open Ended Questions

In order to understand more about what NAs think about their job that may not be included in the HNA-JSQ, open-ended questions were examined. Participants were provided with an open-ended question about what they liked about their job. Specifically, they were asked, “The thing I like most about my job is”. There were a total of 349 responses. The most frequent responses included working with patients (70%) and work schedule (45%). Examples of answers by the participants were “Care that I give to the patients and families”, “ My interaction with my

patients, the ability to show compassion and care to those who need it most” and “Making a difference for the patients”.

Participants were provided with an open-ended question about what they liked least about their job. Specifically, they were asked, “The thing I like least about my job is”. There were a total of 332 responses. The most frequent responses included lack of teamwork (59%), and workload (48%). Examples of answers by the participants were “Lack of appreciation from nurses and management”, “Acuity and workload is way to high, not enough time or help to complete tasks, hence patients and families get mad” and “Lack of teamwork with nurses, too much put on the NA to where they can not complete all the tasks that they are assigned.”

Participants were provided with an open-ended question about suggestions to improve their job as an NA. Specifically, they were asked, “Do you have any suggestions about how to improve the work environment of nursing assistants?” There were a total of 256 responses. Examples of answers by the participants were “Better communication and support from RN and management”, “Decrease patient workload”, “I am not fully utilized as an NAI by the nursing staff”, “Listen to our concerns”, “Nurses need to be more understanding of what we can and can’t do and that we also have a heavy workload”, “Acuity and staffing issues need to be reviewed as a team”, and “Work better together, as a team”.

CHAPTER 5: DISCUSSION

The purpose of this study was to examine the relationship between job satisfaction and intent to leave in the hospital based NA. A discussion of the findings is presented according to the theoretical model that guided this study. Results related to the research questions are discussed, followed by a description of the strengths and limitations of the study, and implications for nursing practice, nursing education, and nursing research.

The majority of the participants were female, Caucasian, and high school graduates. Studies of nursing homes NAs reported similar results as far as gender, race and education. (Castle et al; Karsh et al., 2005; Grau et al., 1991; Zimmerman et al., 2005). The average age of the participants was 41 years old. Age was reported to be on average 25-30 year olds for nursing homes studies (Castle et al., 2007; Karsh et al., 2005; Grau et al., 1991; Zimmerman et al., 2005; Parson, et al., 2003). NAs in the hospital setting are somewhat older than NAs in the nursing home setting.

The majority of the participants worked fulltime, and had been working at the current hospital for 1-5 years. Similar results relating to hours worked and tenure at the facility were found in the nursing home research (Castle et al., 2007; Grieshaber et al., 1995; Kiyal et al., 1997; Decker et al., 2005; Karsh et al., 2005). Thirty six percent of participants were pursuing an advanced degree and the most common degree pursued by the NAs was an associate degree.

Facility characteristics were examined and included hospital bed size, magnet status, and teaching hospital. There were a total of 72 hospitals reported by these study participants. The average hospital bed size was 580. Of the 293 participants that reported their hospital, 64% were in hospitals that had magnet status and 64% were employed by academic teaching hospitals.

Participants were asked to identify the advanced NAI skills that they are approved to perform at their hospital from a list provided. Urinary catheterization, sterile wound dressing change, ostomy care, discontinuing peripheral intravenous infusions, and intravenous site care/dressing change were the most common skills that were reported. The participants were least likely to be responsible for monitoring intravenous flow rates, irrigation of an ostomy, nasopharyngeal suctioning, and gastrostomy feedings. While legislation allows for an RN or LPN to delegate nursing care activities that are appropriate for the level of knowledge and skill of the NAI, limited research has focused on identifying the actual activities performed by the NAs in hospitals. This study suggests that there is variability in the types of advanced skills that are performed by the NAs in hospitals.

The 19 item HNA-JQS demonstrated high reliability (coefficient alpha >0.7) according to Pallant (2013) and comparable to that found in the study by Castle et al (2007). When the seven subscales were each analyzed for reliability, the Training subscale, Rewards subscale, Quality of Care subscale, Workplace Support subscale, and Work Schedule subscale did not have high internal consistency. All of these subscales had a coefficient alpha below 0.7. The Coworkers subscale and the Work Content subscale both had high reliability. In the study by Castle et al (2007), all subscales reached a high reliability. According to Pallant (2013), the Cronbach alpha is sensitive to the number of items in the scale, with scales of fewer than ten items often not achieving a coefficient alpha above the standard of 0.7.

Overall job satisfaction of the NAs in this study was moderate (4.61 on a 7 point scale) and ranged from a low of 2 to 7. This finding suggests that there is a fair amount of variability in the work environment of NAs working in hospitals. Nursing assistants in this study reported the highest satisfaction with the content of their work. Participants expressed positive feelings about

working with patients, having an influence on the health of patients and the relationships with patients and families. The study by Castle et al. (2007) also found that satisfaction with Work Content was high. Brannon et al. (2007) found that NAs working in nursing homes perceived helping others, being needed and making a difference in other's lives, as the rewarding aspects of work. Parsons et al. (2003) found that satisfaction with making a difference in the lives or residents and feeling close to residents and families was related to overall job satisfaction.

Relationships with coworkers was the next highest area of satisfaction but it was much lower than the work content scale. This scale focused on whether NAs felt that they were part of a team, and if there was cooperation among staff. Previous research of nursing home NAs found that coworker support was positively associated with job satisfaction and intent to leave (Schaefer & Moos, 1996; Robison & Pillemer, 2007; Bishop et al., 2009).

Workplace Support was another factor that was moderately positive. Workplace support consisted of having the opportunity to talk about concerns and receive support during work. Similar research of NAs in the nursing home found that employee satisfaction with supervisory support was significantly related to job satisfaction (Parsons et al., 2003; Brannon et al., 2007; Decker et al., 2009).

The areas of job dissatisfaction that were reported by the participants included pay, workload, on the job training, and chances for advancement. There was a high percentage of participants that expressed concerns about these dissatisfiers in the open ended question of what they liked least about their job. An example of one of the dissatisfiers was "pay and lack of more advanced training" and "Lack of job mobility within the organization." One of the examples of a comment made about workload was "acuity and workload is way too high, not enough time or help to complete tasks, hence patients and family get mad." Examples of comments on not

having the ability to grow in the organization were “feeling trapped with no chance for change or advancement” and “no chance for advancement. Once you get NAI seems like it is a dead end, unless you want to become an RN...and I don't. I am happy being a NAI.”

This study found a relationship between intent to leave and level of education on NAs and hospital tenure. The more education that the NA obtained, the more likely it was that they would leave. These results suggest that NAs in the hospital setting often start as an NA and then continue their education to become an LPN or RN. Similar studies found that NAs working in nursing homes with higher education levels were also more likely to leave than those who have limited education (Brannon et al., 2007; Grau et al., 1991; Grieshaber, 1995; & Karsh et al., 2005). For hospital tenure, the more years that they were employed, the less likely it was that they would leave. Studies of NAs working in nursing homes also identified that longer years working in the facility was related to the less likelihood of leaving the job (Grieshaber et al., 1995; Robison et al., 2007; Decker et al., 2009). This study did not find relationships between intent to leave and race, shift, part time, and college.

Multiple regression was then used to identify the best model for predicting job satisfaction and intent to leave. For job satisfaction these included: Coworkers, work schedule, care given to patients, on the job training, and chance for more training were all statistically significant predictors of job satisfaction. The most important predictors were work schedule, coworkers, on the job training, and care given to patients. Forty –seven percent of the variance in job satisfaction was predicted by these variables. For intent to leave these included: hospital tenure, workplace support, work content, work schedule, pay, job training, care given to patients, effect on patients, and whether the NA would recommend working at this hospital to a friend were all statistically significant predictors of intent to leave. The most important predictors were

workplace support, work schedule, whether the NA would recommend working at this hospital to a friend, pay, and care given to patients. Thirty-two percent of the variance in intent to leave was predicted by these variables.

Participants were asked three open-ended questions about their role as an NA in the hospital setting. In the open-ended response question of what you like most about your job, participants indicated that they enjoyed working with patients and were very satisfied with their work schedule. Working with patients was the best predictor of high job satisfaction in this study. Work schedule was also a strong predictor for intent to leave. In response to the question of what they like least about their job, participants indicated lack of teamwork and workload. In response to the question that asked for suggestions on how to improve your job, participants indicated better communication and support from nurses and management, decrease patient workload, utilization of the skills that I possess, and work better as a team.

Conceptual Model

The conceptual model used in this study suggested that personal characteristics, role-related characteristics, and job characteristics were predictors of job satisfaction and intent to leave and the model did explain a moderate amount of the variance in both job satisfaction and intent to leave of. This study found a relationship between intent to leave and hospital tenure and level of education. The more education that the NA obtained, the more likely it was that they would leave. For hospital tenure, the more years that they were employed, the less likely it was that they would leave. Race, shift that they worked, working part time or fulltime, and if they were currently enrolled in college were not significant predictors of intent to leave. All of the job satisfaction variables in the model had a positive correlation with intent to leave. Workplace support, work schedule, satisfaction with patient care and whether they would recommend

working at the hospital to a friend had the strongest relationship with intent to leave. High satisfaction scores were associated with high scores on intent to leave, indicating lower intent to leave. Because of the low response rate, facility characteristics were not fully examined in relation to job satisfaction and intent to leave in this study and this remains a topic for future research.

Overall, the model that was used to guide this study was a useful framework for studying job satisfaction and intent to leave in NAs. The model allowed for the investigation of several factors that are related to job satisfaction and intent to leave in hospital based NAs and it could be used with future studies related to this topic.

Study Strengths

This study is the first of its kind to investigate job satisfaction and intent to leave of hospital based NAs. Studies of NAs in the nursing home have been conducted but few have focused on the hospital NA. The sample in the study was heterogeneous and represented NAs working in several different hospitals across the state rather than one hospital which improves generalizability.

The use of the open-ended response questions in the questionnaire provided an option for the NAs to contribute their thoughts about the role of the NA in the hospital setting. The online methodology for conducting the questionnaire was both a strength and limitation. E-mail contacts can be sent very inexpensively and very quickly to the entire sample. The limitations are that the email may never reach the intended recipient or they may never be opened and read by some recipients. Also NAs that did not have an email account would not receive the questionnaire.

Study Limitations

One of the limitations to this study was the reliability and validity of the HNA-JSQ instrument. Castle et al, (2007) reported in prior testing that the Cronbach's alpha for all of the seven subscales were higher than 0.74. In this study, only two of the seven scales were above the recommended .70. Future studies examining job satisfaction of hospital NAs should consider different job satisfaction instruments that may be reliable and valid with this population.

The sample for this study was also a limitation. The sample of NAs for this study were NAI's that had recently renewed in the last 12 months with the North Carolina Board of Nursing (NCBON) . It was recommended to use the most recent NAI renewals to get the most updated email. It is unknown how many participants may have been accessed if all NAIs with emails were included in the study.

Another limitation to the study was with the Qualtrics program used to collect the data for the questionnaire. After the second week of data collection, the program listed two numbers to inform the researcher as to how many participants started the questionnaire and how many completed the questionnaire. These two numbers were located on the main page of the questionnaire program. The number started was different from the number completed by about half. After discussion with the support staff for this program, it was discovered that the participants who filled out the form that asked for their name and email address for entry of a chance to win one of four gift cards, did not go back and submit the questionnaire. Only half of the questionnaire was recorded since the second half was on a different page. The support staff suggested emailing those that filled out the form to go back and submit the questionnaire. It was decided to send one last email to all participants in hopes that those that did not go back and submit would do so. After the third week, the total participants had increased but not to the total

that had started. The rule of thumb for online survey response rate is 10-20% (LaRose & Tsai, 2014). The response rate for returned surveys for this study was 22%. Only 16% of the surveys were complete.

Recommendations

Nursing Practice

Reflecting a growing need for healthcare workers, the Bureau of Labor Statistics (2014) reports that employment for hospital NAs will increase by an estimated 20 percent between 2010 and 2020. The growing elderly population in the United States is expected to increase demand for healthcare services, therefore the demand for the hospital NA, significantly in the coming years. In addition, many hospital NAs seek advanced training and education to become LPNs or RNs, which creates a high turnover rate in the NA field and drives up the need for new hospital NAs. When employees leave an organization, the impact can be substantial. Turnover has been directly linked to rising employee recruitment and training costs, low levels of employee morale, patient satisfaction, lost productivity, increased workload, and treatment outcomes (Kalisch et al., 2010). By aiding the nursing staff in nearly every aspect of patient care, hospital NAs play a significant role in a patient's day-to-day experience within a healthcare facility.

Understanding why employees are dissatisfied with their job can assist nursing management to make changes or improvements in the areas that have been identified in this study. Nursing management must create a satisfying work environment in order that employees can achieve the aims and mission of the organization that are in line with their own career goals and objectives. The NAs in this study rated their pay and chances for advancement as low. Thus an opportunity to improve job satisfaction may exist by creating job ladders, similar to RNs, as a means for pay and career advancement (Kalisch et al., 2010). NAs also need to be recognized for

the positive impact that they make to nurses and patient satisfaction. One hospital created an educational program for their NAs to educate them as to their importance of their NA role (Prestia & Dyess, 2012). The evaluations from the event showed that the NAs enjoyed the training and wanted repeat education sessions in the future. In this study, scores on the patient satisfaction survey increased after the training program.

Training opportunities were an important factor of high satisfaction for the NAs in this study. Nursing management in conjunction with hospital clinical educators should examine what types of trainings are currently being offered to NAs and provide ongoing educational activities that relate to the role of the NA. Satisfaction with coworkers was also an important factor of high satisfaction for the NAs in this study. Teamwork is a necessary feature of a productive nursing unit and an important factor in job satisfaction. Teamwork has been associated with a higher level of job satisfaction (Collette, 2004; Kalisch et al., 2010). Nurse managers can also take the lead in including NAs in unit based committees and hospital wide committees.

Nursing Education

Nursing education plays a major role in the education and training of the NA in the hospital setting. Academic and clinical nurse educators are being challenged to help nurses develop and use new competencies to work with NAs who possess varied skill levels. Essential competencies are those of delegation and supervision because nurses retain accountability for delegated activities and are therefore responsible for supervision of these activities. NAs in this study reported lack of teamwork, poor communication, and feeling underutilized. Nurse educators from RN programs and NA programs need to collaborate to create educational activities such as simulation scenarios that involve RN and NAs learning to delegate, communicate, and participate in teamwork. NAs also need to learn the scope of a RN's role

within the context of patient care. One study that was conducted with RNs and NAs relating to communication, teamwork, and delegation found that RNs and NAs could benefit from developing competency in these areas by participating in simulation scenarios. Outcomes from this study showed the RNS and NAs were able to resolve delegation conflicts, enhance their communication skills, and feel like they work as a team (Potter, Deshields, & Kuhrik, 2010).

Nursing Research

Findings from this study are a beginning but additional research that focuses on job satisfaction and intent to leave of NAs in the hospital setting is needed. Further investigation of the variables that have been identified in this study needs to be examined. This study only focused on NAs in one state. Studies of NAs from other states may discover other variables which are related to job satisfaction and intent to leave. In the study by Castle et al. (2007), turnover after one year was also examined in relation to intent to leave. Studies on turnover of NAs in the hospital setting have not been conducted. Research on turnover may assist with understanding the variables that relate to leaving the organization. Further research may also be able to identify programs and initiatives implemented by nursing management that can best influence satisfaction in this population. Studies with nurses and how they feel about the role of the NA in the hospital setting needs further exploration. The use of other job satisfaction instruments needs to be examined for this population. Results from this descriptive study can be further researched with a stronger research design. Longitudinal studies would be beneficial to examining various intervention type variables used on a hospital unit for increased job satisfaction.

Summary

This study represents a beginning understanding of the factors that are associated with job satisfaction and intent to leave of NAs in the hospital setting. NAs who are satisfied with their job are more likely to stay. Job satisfaction and intent to leave variables have been identified and need further examination in future studies. Hospital NAs have the opportunity to make a positive impact on the lives of their patients. By aiding the nursing staff in nearly every aspect of patient care, hospital NAs play a significant role in a patient's day-to-day experience within a healthcare facility.

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APPENDIX A: INSTITUTIONAL REVIEW BOARD LETTER

From: **Hand, Mark Charles** HANDM10@students.ecu.edu
Subject: **Fw: Study Correspondence Letter**
Date: **January 28, 2015 at 4:26 PM**
To: **mhand38629@aol.com**

From: **umcirb@ecu.edu <umcirb@ecu.edu>**
Sent: **Tuesday, September 16, 2014 8:04 AM**
To: **Hand, Mark Charles**
Subject: **IRB: Study Correspondence Letter**



EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board Office
4N-70 Brody Medical Sciences Building- Mail Stop 682
600 Moye Boulevard - Greenville, NC 27834
Office 252-744-2914 Fax 252-744-2284 www.ecu.edu/irb

Notification of Initial Approval: Expedited

From: **Social/Behavioral IRB**
To: [Mark Hand](#)
CC: [Martha Engelke](#)
Date: **9/16/2014**
Re: [UMCIRB 14-001444](#)
Job Satisfaction and Intent to Leave of Nursing Assistants Working in the Hospital Setting

I am pleased to inform you that your Expedited Application was approved. Approval of the study and any consent form(s) is for the period of 9/16/2014 to 9/15/2015. The research study is eligible for review under expedited category #7. The Chairperson (or designee) deemed this study no more than minimal risk.

Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The Investigator must adhere to all reporting requirements for this study.

Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).

The approval includes the following items:

Name	Description
Consent HNA-JSQ.doc	Consent Forms
Dissertation Chapter 1,2,3	Study Protocol or Grant Application
Follow-up Email 1.docx	Recruitment Documents/Scripts
Follow-up email 2.docx	Recruitment Documents/Scripts
HNA-JSQ_ Questionnaire814.docx	Data Collection Sheet
HNA-JSQ_ Questionnaire814.docx	Surveys and Questionnaires
Initial Email Requesting Participation.docx	Recruitment Documents/Scripts

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

APPENDIX B: CONSENT

Initial Email Requesting Participation

To: NAIH

From: handm10@students.ecu.edu

Subject: Hospital Nursing Assistants Tell Us What You Think!

Dear Nursing Assistant,

You are being invited to participate in a **research** study titled “*Job Satisfaction and Intent to Leave of Nursing Assistants Working in the Hospital Setting*” being conducted by Mark Hand, a doctoral student at East Carolina University in the College of Nursing. The questionnaire will take approximately 10 minutes to complete. It is hoped that this information will assist us to better understand more about job satisfaction and intent to leave of nursing assistants that work in the hospital setting.

Your participation in the research is **voluntary**. You may choose not to answer any or all questions, and you may stop at any time. There is **no penalty for not taking part** in this research study. Please call Mark Hand at XXX-XXX-XXXX for any research related questions or the Office of Research Integrity & Compliance (ORIC) at XXX-XXX-XXXX for questions about your rights as a research participant.

If you complete the questionnaire, you will be eligible to have your name entered into a drawing for one of **4 \$ 50.00 gift cards**. Once you complete the questionnaire, you will be asked whether you would like to enter your information into the drawing. You will then click on the link to be taken to a website to enter your information. Your information from the questionnaire will in no way be linked to your information in the drawing.

If you decide you are willing to take part in this study, Please click on the link below. If your web browser does not automatically take you to the consent/questionnaire, cut and paste the link into your browser. An answer is required for each question, except for answers where you have an option for entering text to respond. If you exit the questionnaire after beginning it, you will not be able to re-enter the survey. This questionnaire will be active until **October 15, 2014**.

https://ecu.az1.qualtrics.com/SE/?SID=SV_a33J9uY3XZZRHQV

Thank you in advance for your time and help in assisting me and the other hospital nursing assistants to understand more about job satisfaction.

APPENDIX C: PERMISSION TO USE INSTRUMENT EMAIL

From: **Castle, Nicholas George** castlen@pitt.edu
Subject: RE: Request from Doctoral Student
Date: August 19, 2013 at 11:36 AM
To: Hand, Mark HANDM@ecu.edu

Mark

Happy to help. You are welcome to use the instrument. It is not copyrighted in any way. A report is attached. Please let me know if I can be of further help.

- Nick

From: Hand, Mark [mailto:HANDM@ecu.edu]
Sent: Saturday, August 17, 2013 4:54 PM
To: Castle, Nicholas George
Cc: Hand, Mark
Subject: Request from Doctoral Student

Dr. Castle, My name is Mark Hand and I am a Phd candidate in the College of Nursing at East Carolina University Greenville, North Carolina USA. I have an interest in the role of certified nursing assistants that work in an acute care hospital. I am very interested in job satisfaction and also self efficacy. I located your study and instrument in the Applied Nursing Research Journal from the 2010, issue 23 " An instrument to measure job satisfaction of certificated nurse assistants." I was wondering if you would be willing to let me use the instrument NH-CNA-JSQ as part of my dissertation work, it would be much appreciated. Any further information that you could provide would be great. I look forward to hearing from you.
Mark Hand RN, PhD (c) , CNE

Mark C. Hand, RN,PhD (c) ,CNE
Clinical Assistant Professor
ECU College of Nursing
2114 Health Sciences Building
Greenville, NC 27858
252-744-6519
handm@ecu.edu

"Learn from yesterday, live for today, hope for tomorrow. The important thing is not to stop questioning."

-Albert Einstein



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APPENDIX D: Hospital Nurse Assistant Job Satisfaction Questionnaire (HNA-JSQ)

Background Information

A. This section of the survey asks for some information about your background and work experience.

A1 What is your gender?

- Female
- Male

A2 What is your current age?

A3 What race or ethnic group do you most closely identify with?

- Black or African American
- American Indian or Alaska Native
- Asian
- Hispanic or Latino
- Native Hawaiian
- Pacific Islander
- Mixed race
- Caucasian
- Other

A4 What is your highest level of education completed?

- High School Diploma
- GED
- Associate Degree
- Baccalaureate Degree
- Masters Degree
- Doctorate Degree

A5 What is your current job title?

A7 Are you listed as an:

- NA I
- Both NAI and NAII

A8 What shift do you currently work?

- 700 am - 700 pm (Day)
- 700 pm - 700 am (Evening)
- Other (3) _____

A9 How many hours a week do you work?

- Full-time 40 hours
- Part-time 20 - 40 hours

A10 How long have you been working at your current hospital?

- Less than 1 year
- 1 - 5 years
- 6 - 10 years
- 11 - 20 years
- Greater than 20 years

A11 How long have you been a nursing assistant?

- Less than 1 year
- 1 - 5 years
- 6 - 10 years
- 11 - 20 years
- Greater than 20 years

A12 What type of unit do you currently work as an NA?

- Medical/Surgical
- Emergency Department
- Intensive Care Unit
- Intermediate Care Unit
- Pediatric Unit
- Obstetrics
- Oncology Unit
- Rehabilitation Unit
- General Medicine
- Palliative Care
- Psych Unit
- Other

A13 How long have you worked on that unit?

- Less than 1 year
- 1 - 5 years
- 6 - 10 years
- 11 - 20 years
- Greater than 20 years

A14 Are you approved in your hospital to do any of the following Nurse Aid II tasks: (Select all that apply)

- Oxygen Therapy
- Break up and Removal of Fecal Impaction
- Sterile Wound Dressing Change
- Assemble/flush IV tubing during set-up
- Monitoring IV flow-rate
- IV Site care/dressing change
- Discontinuing peripheral intravenous infusions
- Monitoring oral/nasogastric infusions;
- Gastrostomy feedings
- Clamping feeding tubes
- Removing oral/nasogastric feeding tubes
- Suctioning of oropharyngeal
- Suctioning of nasopharyngeal
- Tracheostomy Care
- Ostomy care
- Irrigation of ostomy
- Urinary Catheters –catheterizations
- Irrigation of urinary catheter tubing

A15 Are you currently enrolled in College?

- Yes
- No

If No Is Selected, Then Skip To Job Satisfaction

A15b If yes, what is your major?

A16 What type of Degree will be awarded at Graduation?

- Certificate
- Diploma
- Associate Degree
- Bachelor's Degree
- Masters Degree
- Other _____

Job Satisfaction This section of the survey asks for your opinions about your job, and how satisfied you are with your work.

B1 How satisfied are you with what you are paid?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B2 How satisfied are you with the chances for advancement?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B3 How satisfied are you with the people that you work with?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B4 How satisfied are you with your workload?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B5 How satisfied are you with whether you feel part of a team effort?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B6 How satisfied are you with the cooperation among staff?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B7 How satisfied are you with the on the job training you have had to do your job?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B8 How satisfied are you with the amount of support you get when doing your job?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B9 How satisfied are you with the chances you have to talk about your concerns?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B10 How satisfied are you working with patients?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B11 How satisfied are you with how your role influences the health of patients?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B12 How satisfied are you with your relationship with patients and families?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B13 How satisfied are you with the demands that patients and families place on you?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B14 How satisfied are you with your work schedule?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B15 How satisfied are you with the amount of time that you have to do your job?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B16 How satisfied are you with your skills to adequately do your job?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B17 How satisfied are you with the chances you have for more training?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B18 How satisfied are you with the care given to patients?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B19 How satisfied are you with the effect you have on patients?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B20 Generally speaking, how satisfied are you with your job?

- 1 (Strongly Dissatisfied)
- 2 (Somewhat Dissatisfied)
- 3 (Slightly Dissatisfied)
- 4 (Neither Dissatisfied nor Satisfied)
- 5 (Slightly Satisfied)
- 6 (Somewhat Satisfied)
- 7 (Very Satisfied)

B21 Would you recommend working at this hospital to a friend?

- Yes
- No

Intent to Leave

This section of the survey asks for your opinion about whether you intend to stay at this hospital.

C1 All things considered, I would like to find a comparable job in a different organization:

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

C2 I am thinking about quitting:

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

C3 It is likely that I will actively look for a different organization to work for in the next year:

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

C4 At the present time I am actively planning to return to school:

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

C5 The results of my search for a new job is encouraging:

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

C6 I will probably look for a new job in the near future:

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

C7 At the present time, I am actively searching for a job in another organization

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

C8 I intend to quit:

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

C9 The thing I like most about my job is:

C10 The thing I like least about my job is:

C11 Do you have any suggestions about how to improve the work environment of nursing assistants?

C12 What is the name of the hospital where you currently work?