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FACTORS THAT MOST INFLUENCE JOB SATISFACTION AMONG CARDIAC NURSES

IN AN ACUTE CARE SETTING

Thesis submitted to The Graduate College of Marshall University

In partial fulfillment of the Requirements for the degree of Master of Science Nursing

by

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ABSTRACT

The purpose of this study is to determine cardiac nurses' level of job satisfaction through an examination of the relationship between Herzberg's motivation and hygiene factors and job satisfaction. The study used a non-experimental, quantitative design with a theoretical framework based on Herzberg's Motivation Versus Hygiene theory. The independent variables were motivation and hygiene factors and the dependent variable was nurse job satisfaction. The Work Quality Index and a demographic survey were given to approximately 32 registered nurses at a medical center in southwestern, West Virginia. The data was collected over three weeks and was analyzed using descriptive and correlational statistics. The results showed that nurses in this sample had a moderate level of job satisfaction. It was also found that Motivation Factors and Hygiene Factors correlated almost equally with job satisfaction, meaning that nurses must be satisfied with both types of factors to be overall satisfied with their jobs.

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CHAPTER I

Factors That Most Influence Job Satisfaction among Cardiac Nurses in an Acute Care Setting

The concept of job satisfaction among nurses is of an unprecedented importance given the current job market. Satisfied nurses are more likely to stay not only in the field of nursing, but in the organization in which they are satisfied (Urden, 1999). Considering the significant nursing shortage, retention of nursing staff is absolutely vital to the healthcare industry (Bradley, 2000). As hospital administration realizes the full extent of the nursing shortage (which is predicted to only get larger in scope) they are likely to reconsider how patient care is delivered; this includes nearly all aspects of the nurses' work environment. They are also likely to see the true value of quality nursing care from experienced nurses. Nurse leaders must be armed with the information needed to assist in creating a workplace that will not only attract new nurses, but will retain the nurses it already has (Bradley, 2000). In order to do this, nurse administrators should not forget the classic job satisfaction research of the past such as Fredrick Herzberg's Motivation Versus Hygiene Theory (Herzberg, 1959). Instead, they should use that information as a foundation upon which to build current knowledge. The purpose of this study will be to determine cardiac nurses' level of job satisfaction through an examination of the relationship between Herzberg's motivation and hygiene factors and the nurses' overall job satisfaction.

Background

Urden (1999) found that overall job satisfaction was the most important reason that nurses chose to stay in a particular job. Very little has been done to promote job satisfaction in most healthcare facilities. Instead, nurses often work in unsatisfactory conditions with inadequate staffing and a shortage of basic supplies (Friedrich, 2001). These things, among others, may lead to job dissatisfaction and encourage nurses to find employment elsewhere, often outside the field of nursing. Research is needed to explain what a nurse needs from the workplace in order to be satisfied.

While nurses' have been dedicated to improving customer service and organizing clinical performance improvement policies, the environment in which nurses' work has suffered. The decline in the quality of nurses' work environment is most likely due to the hospital industry's restructuring and attempts to stay profitable, especially in a strong managed-care market (Bradley, 2000). Research by Laschinger, Shamian, and Thomson (2001) suggested that an unfavorable work environment may counteract attempts to improve patient satisfaction because higher levels of job satisfaction were associated with a higher quality of nursing care.

The United States had an estimated 120,000 nursing vacancies in hospitals in 2001 and that number is continuing to increase (Coile, 2001). In a study by Upenieks (2003), it was reported that there will be an estimated shortage of RNs with a BSN of 1,119,000 and an estimated shortage of RNs with a MSN or Doctorate of 507,000 by the year 2010. Staffing shortages could potentially lead to a decreased quality of nursing care. It is theorized that the current nursing shortage was caused by a number of factors. These factors include the countless job opportunities that are now available to women, the fact that the average age of a nurse is 46 years and many nurses either retire or work fewer hours after the age of 50, and that the wages level off early in a nursing career unless the nurse goes into a management position (Coile, 2001). Research has suggested that one of the primary issues fueling the shortage is that many nurses are dissatisfied with their jobs and are consequently leaving the profession (Schiff, 2002). Although Coile (2001) found that financial gain is not normally the most important factor in relation to job satisfaction, many healthcare organizations have only offered band-aid type fixes such as salary raises to attract and retain nurses. In many instances, however, those seemingly

high salaries (average increase of 14% in the past two years) were being offset by weaker benefits packages. The cuts in benefits have included such things as a decrease in sick, vacation, and personal days and paid holidays for all RNs and a decrease in medical and dental coverage, tuition and continuing education reimbursement, and malpractice insurance for part-time RNs (Bauer, 2001). Research has shown that hospitals which offered certain features were likely to have a low rate of RN turnovers. These features were adequate staffing levels, support for RNs when they acted as patient advocates, decentralized management, a mission of caring, RNs opportunities to be heard regarding delivery of care, and educational opportunities (Coile, 2001).

Problem Statement

There are numerous research studies that assess the ways in which autonomy, empowerment, control over practice, and demographic factors affect nurses' job satisfaction (McNeese-Smith, 1999; Martina Price, 2002; and Gifford, Zammuto, Goodman, and Hill, 2002). After a review of the literature specific to nurses in an acute care setting, little research could be found about which factors in the workplace most influence staff nurses' satisfaction and none could be found specific to cardiac nurses. The lack of research addressing the factors that influence nurses' job satisfaction is a problem because if nurse administrators do not know what the RNs want, they cannot make changes to better satisfy the nurses. The factors that will be assessed in this study include professional work environment, autonomy of practice, work worth to self and others, professional relationships, professional role enactment, and benefits (Whitley & Putzier, 1994). These factors will be used in the examination of cardiac nurses' job satisfaction and Herzberg's Motivation versus Hygiene Theory. It is important for the nurse administrator to understand which aspects of a nurses' job are best correlated with satisfaction and therefore which aspects the administrator should focus on when trying to increase job satisfaction among employees.

Specific Aims

The specific aims of the study are to:

- 1. Assess the level of the respondents' overall job satisfaction.
- 2. Examine the relationship between motivation and hygiene factors and job satisfaction.

Operational Definitions

The definitions of the first four terms that will be used in this study are derived from Herzberg's Motivation Versus Hygiene Theory (1959). For the purpose of this study the following operational definitions will be used.

1. Job satisfaction will be a feeling of happiness about the work that one does as measured by the subjects' responses on the WQI (Whitley & Putzier, 1994).

2. Job dissatisfaction will be a feeling of unhappiness about the work that one does as measured by the subjects' responses on the WQI (Whitley & Putzier, 1994).

3. Motivation factors will be termed motivators or satisfiers and are directly related to job satisfaction. These factors are achievement, recognition, work itself, responsibility, and advancement. The WQI subscales of professional work environment, autonomy, and work worth to self and others will be considered to assess motivation factors.

4. Hygiene factors will also be termed dissatisfiers and are directly related to job dissatisfaction. These factors include company policy and administration, supervision, salary, interpersonal relations, and working conditions. The WQI subscales of professional relationships, role enactment, and benefits will be considered hygiene factors. The term hygiene is used in reference to "medical hygiene…operates to remove

health hazards from the environment" (Herzberg, 1959, p. 113). Hygiene factors are said to be preventative of dissatisfaction similar to how hygiene is preventative of diseases.

5. Registered nurse (RN) will be a general duty staff nurse performing direct patient care or a charge nurse.

Significance of the Problem

This study provided information that is important to nursing administration, practice, and education. Administrators could use this information to build solid and supportive units. This is important to because the culture of the unit and the quality of nursing staff affects every aspect of a nurse's practice and also the patients' care. Finally, this study can is important to education because it can be used as a building block to assist in developing and researching strategies to attract and also retain nurses. Also, when there is poor retention in a facility, the educations of nurses suffer due to the lack of experienced nurses to mentor new nurses.

A thorough understanding of nurses' job satisfaction is extremely important to nursing administration. If nurse leaders comprehend what makes nurses satisfied, they can make changes to facilitate nurse satisfaction and therefore improve patient satisfaction and also employee retention. Both of which could lead to increased profits for the organization. Nurse executives have found that strategies which lead to high job satisfaction are among the most effective in retaining nurses (Anonymous, 2002).

In order to maintain adequate and safe staffing levels, the retention of nursing staff is vital during a nursing shortage. The importance of adequate staffing is clearly shown by statistics such as higher nurse-patient ratios correlate with lower instances of adverse events such as shock, gastrointestinal bleeding, urinary-tract infections, and pneumonia. It has also been found that insufficient staffing played a role in one out of every four sentinel events that have occurred since 1996 (Morrissey, 2002). According to Berens (2000, September 10), overloaded registered nurses (RNs) have also had a role in at least 1,720 deaths of patients and in 9,584 injuries to patients in the United States since 1995. Maintaining safe staffing levels have been such a problem that the government has even considered laws regarding staffing ratios for RNs (Bradley, 2000). Low turnover rates in hospitals have also been shown in the literature to have a positive effect on patient outcomes. Morrissey (2002) reported that hospitals with low turnover rates (<12%) had shorter average lengths of stay and lower death rates than hospitals with high turnover rates (>22%).

Another significant issue regarding the retention of nursing staff is the lack of formal and informal mentorship that could occur in part because of a decrease in the amount of experienced nurses in the workforce. The establishment of a relationship between novice and expert nurses is important for the safety of patients and for the proper development of inexperienced or newly recruited staff. It is necessary to have experienced staff available to offer guidance, answer questions, and assist in difficult or unfamiliar situations (Mee, 2002). Mentoring can also lead to better retention of new nurses, increased job satisfaction among new nurses, and improved patient care (Polifroni, 2002). The American Hospital Association (AHA) recognized that inadequate training and staffing places patients at risk for medical errors (Berens, 2000, September 11). No matter how effective the recruitment efforts are; hospitals need the retention of valuable, experienced RNs to be successful in the healthcare industry.

Retention is also important when considering the budget and profit margin. Training new staff to replace unsatisfied employees who resign is very expensive. The average cost of the turnover of an RN who makes \$47,000 per year is \$33,000 (Contino, 2002). This expense is reflected on the hospital's finances and on the patients' bill. Hospitals with low turnover rates

had an average return on their assets of 23% while hospitals with high turnover rates averaged a return of 17% and also the cost per discharge at those facilities was 36% higher (Morrissey, 2002). Nurses leaving organizations is especially a problem in the current job market. Staff members are not afraid of being unemployed if they resign so they are more likely to leave in search of more satisfying work (Price, 2002).

Research has suggested that nurse satisfaction is positively correlated with patient satisfaction (Tzeng & Ketefian, 2002). This correlation is important because it is commonly accepted that satisfied patients return to healthcare facilities for their future medical needs which leads to increased profits from the return business. Patient satisfaction has always been important in nursing, but recently even more emphasis has been put on this area. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) has named it a critical health care outcome indicator (Tzeng & Ketefian, 2002). This classification means that health care facilities who are accredited by JCAHO will have patient satisfaction monitored as an indicator of the quality of the facility. The link between high employee job satisfaction and patient satisfaction may be a result of several different things. One possibility is that nurses increase productivity when they are satisfied. Another is that there are fewer turnovers of registered nurses (RNs) when they are satisfied with their jobs. A lower turnover rate means that there is less potential for nurses to be working understaffed and the nurses are more experienced in the facility in which they are working. This is important because when nurses are understaffed they are not able to give each patient the time and attention that they deserve. Studies have shown that understaffing has led to negative outcomes for patients (Morrissey, 2002; Berens, 2000, September 10). Research has also found that patients are more likely to have positive outcomes in facilities with higher ratios of nurses who have baccalaureate or higher degrees (Aiken, Clarke, Cheung, Sloane, & Siber, 2003. These positive outcomes are likely to lead to higher patient satisfaction and therefore higher nurse satisfaction.

Summary

In conclusion, nurses' job satisfaction and the factors that influence this needs to be examined further. This study also assessed Herzberg's Motivation and Hygiene Factors and nurse satisfaction. The results of the study could lead to better recruitment and retention of nurses.

CHAPTER II

Chapter II includes a review of current literature related to job satisfaction. It also gives a description Fredrick Herzberg's work. Herzberg's Theory of Motivation Versus Hygiene was used as the theoretical framework of the study. Herzberg's theory was chosen to illustrate the different ways in which people are motivated.

Literature Review

An article by Tzeng and Ketefian (2002) examined the relationship between nurses' job satisfaction and patients' satisfaction with the nursing care they received while inpatients in a teaching hospital in Taiwan. This exploratory study was based on a conceptual framework designed by the authors to test their conceptual model and used a quantitative, ex post facto design. Cluster sampling was used to select the 59 patients who participated in the survey and convenience sampling was used to select the 103 nurses. The patients and nurses were from one of four medical-surgical units, a pediatric unit, or an obstetrics/gynecology unit and were scheduled to be released 24 to 36 hours after the time they were surveyed. The subject refers to the person completing the survey and was the patient in 41.2% of the cases, the spouse in 26.5%, friends in 17.6%, and children in 14.7%. The sample was 56% female and 44% male, ranged in age from 26 to 68 years, and had been hospitalized from 1 to 137 days. There were 8 to 24 valid questionnaires returned (91% overall response rate) from each of the six units. The average age of the nurses was 23.6 years, the average number of years in nursing was 2.8, 82% were unmarried, 88.3% had associate's degrees, and 8.8% had bachelor's degrees.

Data collectors explained the study in person to the non-nursing subjects. The survey was completed by the subject 82% of the time and by the researcher (who read the questions and recorded the patient's responses) 18% of the time. The instrument used was a Likert scale

ranging from 1(very strongly disagree) to 5 (very strongly agree) and 9 (not applicable) and was called the Patient Satisfaction Ouestionnaire with Quality of Nursing Care. It contained 27 items and was divided into 7 scales: explanation of care, art of care, management of pain and discomfort, patient education before discharged or leaving, arrangement for home care and follow-up, being courteous to family members, and emergency department services (not used in this study due to inpatient sample). All nurses working on the six units were given questionnaire packets by their nurse managers. The packets were returned either by mail or through their nurse's manager (placed in sealed envelopes that were provided to ensure confidentiality). The researchers used the Nurses' Job Satisfaction Questionnaire; it was a Likert scale with the same number values as the tool used for the non-nursing subjects. It assessed these variables: indirect environment, direct working environment, salary and promotion, self-growth, challenging work, interaction with and feedback from patients and/or patients' family, leadership style, working atmosphere, family support, and religion. Two variables were added to the survey: general job satisfaction and general happiness (ranging from 1 being very strongly dissatisfied or unhappy to 5 being very strongly satisfied or happy and 9 being not applicable). All instruments used were found to be reliable and valid.

Tzeng and Ketefian (2002) found several significant relationships between the nurses' and patients' responses. All of the patient scales except education before discharge correlated (0.826 to 0.965 correlation coefficient; alpha 0.05, two-tailed) with at least one of the nurses' factors for job satisfaction. Overall job satisfaction correlated significantly (0.866) with the inpatient satisfaction of the management of pain and discomfort. General happiness correlated with patient satisfaction with explanation of care, art of care, management of pain and discomfort, and arrangement for home care and follow-up.

Based on the results of this study, hospital administration could improve patient satisfaction and therefore their intent to return to the facility by improving nurse satisfaction (Tzeng and Ketefian, 2002). A limitation of this study was a small sample size obtained from only one hospital which made the research harder to generalize and also weakened its power to show relationships. Another limitation was that the differences among individual patient and nurse factors could not be accounted for because the patients' had several different nurses caring for them during their stay in the hospital. Also, the time that the patients were surveyed could have led to unreliable responses in regard to inpatients' satisfaction with patient education before discharge and the arrangement for home care and follow-up since the subjects were surveyed before the time that these things normally occur.

No other articles could be found relating nurse satisfaction to patient satisfaction. There were, however, studies attempting to determine which factors lead to nurse satisfaction. One such study was by McNeese-Smith (1999). The research explored the factors that lead to nurse job satisfaction and dissatisfaction through a qualitative research design. The study used semi-structured, audio-taped interviews conducted by the researcher in private rooms to gather information. These interviews were conducted on all shifts and lasted six weeks. At that time, the interviews were only revealing duplications of data previously collected. The sample consisted of 30 nurses on six different units in a hospital in California that was associated with a University. Three of the units were found by the researcher in a previous study to have had a high level of job satisfaction and three of them had a low level of satisfaction. Purposive sampling was used to choose nurses who participated in the previous study in order to increase the chances of finding subjects who had clear opinions about their jobs. The nurses were 93% female, had an average age of 43 years old, and had an average of 16 years experience in nursing

with an average of 11years in the facility where the research was being conducted. The nurses' educational levels were varied: 23% had a diploma, 23% had an associate's degree, 43% had a bachelor's degree, and 10% had a graduate degree. A large number (67%) of the participants received their nursing education outside of the United States. The sample was made up of 60% Filipino nurses and the other 40% were Asian, African-American, Caucasian, Latino, and Chicano.

Content analysis was performed on the data accumulated in the transcribed interviews. The information was first coded and placed into categories and themes. It was further examined to find more specific concepts in the themes. The coding was done by the researcher and an assistant (found to be 80% consistent between them) and was repeated two days later and found to be stable. Complete thoughts were the units analyzed in McNeese-Smith's (1999) study and they ranged in length from one word to several sentences.

The results of the study were reported as factors causing job satisfaction and factors causing job dissatisfaction (McNeese-Smith, 1999). It was found that nurses were often satisfied and dissatisfied about certain aspects of the same topic, but that they usually stated an overall feeling of either satisfaction or dissatisfaction. Similar categories were found for both satisfiers and dissatisfiers, but different themes were identified for each. It was also common for dissatisfied nurses to see something as a burden when a satisfied nurse saw the same thing as a challenge. This difference in viewpoints suggested a possible link between personal characteristics and job satisfaction, although that connection was not specifically identified in the study. The research currently being proposed will not analyze personal characteristics either.

The first three categories related to job satisfaction had to do with the actual work and included patient care (providing good care, recognition from patients or their families, seeing

improvement in patients' health, sharing important moments in patients' lives, and a feeling of an emotional or spiritual reward); the environment (always changing, fast moving, pleasant, and wholesome); and a balanced workload (challenging, but able to complete necessary work to meet patient goals). Other categories dealt with the characteristics of the nurses such as personal factors (work at a convenient location, financial benefits for family, avenue through which personal goals can be met, and congruence of work and personal values or religious convictions); the nurses' cultural background (work as a way to improve living conditions and value hard work and serving others) and their career stage (change leads to opportunities, mentoring, mature appreciation for the job, and being able to focus on the job instead of family responsibilities). Relations with co-workers (friendship and rapport with staff, interdependence and cooperation, and rapport with / appreciation from physicians); salary and benefits; and professionalism (provide direct patient care, independent thinking, involvement in the organization, learning, and professional growth) were additional satisfiers (McNeese-Smith, 1999).

There were also three categories related to job dissatisfaction that had to do with the nurses' actual work (McNeese-Smith, 1999). The categories were patient care including abuse from patients, bad outcomes for patients, patients not responsive to nursing care or teaching, and the fear of, or actually making errors; factors that interfere with patient care such as the lack of equipment, supplies, or specialized services, increased paper work, and delays in contacting physicians; and feeling overloaded with high acuity patients, insufficient staff, fear of mistakes, several different things going on at once, and a sense of poor quality care. As with the satisfiers, there were categories of dissatisfiers that dealt with nurse characteristics such as personal factors (problems with family could cause job dissatisfaction) and the nurses' career stage (burnt out or tired). Once again, relations with coworkers (the organization tolerates others who provide poor

care and do not follow policies, coworkers' negative attitudes, gossip and criticism among staff, and rude physicians who blame nurses) were identified as an important factor. One category that was listed as a dissatisfier and not as a satisfier was organizational factors which included the possibility of layoffs, politics in the organization, unfairness, and the potential for physical danger.

There were few significant limitations of this study. The results of this research were not easily generalizable due to the small sample size that was chosen from only one hospital, the ethnicity and culture of the subjects, and the large amount of experience they had in nursing and at the facility where the study was conducted. As with all research, especially qualitative research, there was the risk of situation contaminants such as a stressful shift or the time of day, response set biases, transitory personal factors, and administration variations including the use different probes in the interviews (McNeese-Smith, 1999).

Martina Price (2002) also looked at the job satisfaction of registered nurses and the factors that led to satisfaction or dissatisfaction. The nurses in the acute adult hospital where the study took place made up 40% of the workforce and although there were numerous nursing vacancies, the administration had no knowledge of the nurses' job satisfaction or what influenced their satisfaction. Price's study had a quantitative, descriptive design and was based on the theoretical framework of Maslow's need hierarchy theory. He used a systematic sampling design to select 175 of the 351 E-grade RNs who worked in the 26 adult acute medical and surgical wards in a large, teaching hospital. Due to an 87% response rate and the return of 11 incomplete questionnaires that could not be used, the final sample consisted of 141 nurses. Of those, 95% were female, 48% were between 31 and 40 years of age, 29% were 20 to 30 years old, 57% had children or dependents, and 43% worked part time.

The instrument used in Price's (2002) study to measure nurse satisfaction was the Mueller McCloskey Nurses Satisfaction Scale (MMSS). It is a Likert scale ranging from 1 (very dissatisfied) to 5 (very satisfied) and it has been found to be both valid and reliable with a correlation coefficient of 0.89. The MMSS had eight subscales that included satisfaction with extrinsic rewards, scheduling, balance of family and work, co-workers, interaction opportunities, professional opportunities, praise and recognition, and controls and responsibility. This survey was mailed to the nurses with a cover letter explaining the research. The respondents mailed the survey back anonymously after its completion.

The results of the study showed that 58% of the participants were generally satisfied with their job and 42% were either dissatisfied or undecided. According to the mean scores of the eight subscales on the MMSS, co-workers (3.8) and extrinsic rewards (3.5) were rated the highest in relation to satisfaction and professional opportunities (2.6) and control and responsibility (2.7) were rated the lowest. The statistics were also analyzed based on each of the 31 items on the MMSS using descriptive statistics. The three items that the respondents were most satisfied with (mean score of 4) were annual leave, hours worked, and nursing peers. The three items they were most dissatisfied with (mean score of 2.3) were child care facilities, compensation for working weekends, and control over work conditions. It was also found that the most satisfied nurses were working part-time, between 51 and 60 years old, and had been working in post for 7-10 years. The most dissatisfied nurses were working full-time, between 31 and 40 years old, and had been working in post for 3-4 years (Price, 2002).

The results of this study emphasized the relationships between co-workers and employment benefits as satisfiers along with low levels of perceived autonomy and professional opportunities as dissatisfiers. Most other factors of dissatisfaction were related to the amount of encouragement, feedback, and recognition that is received from administration and the nurse's opportunities to participate in decision-making. All of these aspects of dissatisfaction could be changed at the administrative and managerial levels to increase the nurses' satisfaction. There were limitations listed by the author. One such limitation was that it was possible that nurses rated items that weren't applicable to them a 3 (neither satisfied nor dissatisfied) since the respondents were not asked to rate the importance of the items. Rating items that were not applicable a 3 could have contributed to the low score of childcare facilities. It is also possible that extraneous variables, such as individual characteristics, influenced the results of the study. Another limitation of the study was that it was not easy to generalize because the sample was restricted to only E-grade (a particular pay grade) nurses in one particular hospital (Price, 2002).

Other researchers looked more specifically at how the culture of the hospital of unit effected nurse job satisfaction. Gifford, Zammuto, Goodman, and Hill (2002) examined the relationship between the hospital unit's culture and the quality of nurses' work life. A quantitative, ex post facto approach was used to survey RNs from the obstetric units of seven different facilities in five different cities in the western United States. The sample of 276 nurses was selected from a group of participants in a larger study that used convenience sampling and had a 32.8% response rate.

The Competing Values Framework (CVF) was the conceptual framework used to examine the organizational culture of the nursing units. There were four models of organizational culture represented in the CVF. Each was described by certain outcomes and the ways that they were attained. The first model was the internal process (hierarchal-control and internal focus) model. It used centralized decision making, formal roles, and the management of information to gain stability and control. The second model was the human relations (groupinternal focus and flexibility) model which encouraged staff morale and coworker relationships through participatory decision making, sincere and horizontal communications, and teamwork. The next model was the rational goal (rational-control and external focus) model. Goal centered centralized decision making, task related communication, and planning were used in this model to promote an efficient and productive organization. The last model was the open systems (developmental-flexibility and external focus) model. In this model, a transformational and horizontal communication style, a willingness to change, and an adaptable decision making process is used to promote growth and the acquisition of resources. Although this framework describes four distinct types of organizational culture, a combination of the types is most commonly used because too many factors from any one model can be detrimental to an organization (Gifford, Zammuto, Goodman, and Hill, 2002).

The hypotheses of the study were that "the CVF models will be associated with organizational commitment, job involvement, empowerment, job satisfaction, and intent to turnover" and that "the human relations model will be positively associated with organizational commitment, job involvement, empowerment, and job satisfaction, and negatively associated with intent to turnover among hospital nurses" (Gifford, Zammuto, Goodman, and Hill, 2002, p. 16). The independent variable was the type of organizational culture and the dependent variables were job involvement, job commitment, empowerment, intent to turnover, and job satisfaction. The questionnaires were sent to the participants via a company mailing system and were returned to the researchers directly. The CVF survey consisted of five questions with four possible scenarios related to each and the respondents assigned 100 points between the scenarios depending on which ones were the most like their hospital. The survey also used four variables (commitment to organization, empowerment, involvement with job, and intent to turnover) to

measures the nurses' QWL. Five statements on a 5-point Likert scale were used per variable. The average coefficient alpha for the QWL survey was 0.81. Analysis of variance was used to show a positive correlation between the human relations model and commitment to organization, empowerment, and job satisfaction; but job involvement was not statistically significant. It was determined that the human resource model was the model with the most statistically significant relationship to nurses' QWL and also that it correlated with turnover.

The results of this research suggest that a balanced organizational culture with an emphasis on the human relations model will lead to a higher QWL and therefore a lower turnover rate. The major limitation of this study was that it was not easy to generalize the research to non labor and delivery units. Convenience sampling (the weakest sampling design) was also used to obtain the sample (Gifford, Zammuto, Goodman, and Hill, 2002).

Laschinger, Shamian, and Thomson (2001) found similar results when they studied what impact, if any, characteristics that are common to magnet hospitals have on job satisfaction, trust, perceived quality of care, and burnout among nurses. The study had a quantitative, ex post facto design that tested a model created by the researchers, but based on the theory of Aiken, Sloane, Lake, and Sochalski (1997). The researchers hypothesized that nurses who perceived their work environments as having high levels of autonomy, control, and collaboration would have increased levels of organizational trust and decreased levels of burnout. They also thought that these factors would lead to job satisfaction and a perception of delivering high quality care. The sample was a subset taken from a larger study that used a stratified random sampling technique. The participants worked on medical-surgical units and were taken from a registry list of the College of Nurses of Ontario. Subjects in this study completed survey items related to organizational trust in addition to those items required by the larger study. The respondents were 3,106 nurses who worked at one of 135 hospitals and they were an average age of 44.1 years with an average of 19.2 years of nursing experience. The majority of the nurses (88%) held diplomas and only 12% had degrees higher than a diploma.

The independent variables in this study were autonomy, control over practice, and collaboration; the dependent variables were trust in management, level of burnout, job satisfaction, and the perceived quality of care that was delivered (Laschinger, Shamian, and Thomson, 2001). Four different tools were used in the survey. The Nursing Work Index (NWI) is a Likert scale which assesses three subscales that measure each of the three independent variables (Cronbach's alpha reliability of 0.96). The Interpersonal Trust at Work Scale consists of 12 items which are divided into four subscales, but only 2 subscales (those relating to trust and confidence in management) were used (Cronbach's alpha reliability of 0.91). Burnout was measured using the Human Services Survey (HSS) which contains 22 descriptive statements and asks the respondents to rate the degree in which they agree with the statements (alpha reliability of 0.83). The last instrument used measured job satisfaction and the nurses' perceived quality of care (alpha reliability of 0.73) and was a four-point Likert scale that ranged from 1 (very dissatisfied) to 4 (very satisfied). Perceived quality of care was analyzed using a 4-point likert scale (ranging from 1 being poor to 4 being excellent). There were two measures that looked at the quality of care normally delivered on the unit, the quality of care delivered in the last shift, whether or not the nurse would recommend that family go to the hospital, and the quality of care that is generally given on the unit. These questionnaires were mailed out three times to improve the response rate.

Descriptive statistics were first conducted on the data. Moderate levels of autonomy, control over practice, collaboration with physicians, burnout, trust in management, job

satisfaction, and nurse-assessed quality of care were found among the nurses in the study. Laschinger, Shamian, and Thomson (2001) then used path analyses to test the model. Structural Equation Modeling (SEM) was used to find relationships among the information collected. The incremental Fit Index (IFI), Comparative Fit Index (CFI) and Chi-square (Chi²) was used to assess the fit of the data to the model. When the first model (job satisfaction as dependent variable) was tested, it did not meet the criteria for fit according to the above mentioned tests. However, when the paths were tested individually, they were all statistically significant and the model was a reasonably good fit. The addition of other paths in the model was suggested by the modification indices to obtain a better fit for the overall model. In this model, high levels of autonomy, control, and collaboration were positively correlated (0.56) with trust in management, which was also positively correlated (0.17) with job satisfaction. High levels of autonomy, control, and collaboration were negatively correlated (-0.62) with burnout, and therefore, positively associated with job satisfaction (0.55). The amount of explained variance in the model was 39% and the indirect effect was 0.436. The second model had nurse-perceived quality of care as the dependant variable and it yielded an overall reasonable good fit to the data. The relationships between the organizational characteristics and burnout and organizational trust were the same as in the first model. High levels of trust in management were positively associated (0.34) with nurses' perceived quality of care and low burnout levels were also associated (-0.42) with a higher perceived quality of care. This model also had an explained variance of 39%, but the indirect effect was 0.459.

The results supported the hypothesis of the study. It was found that an empowering work environment leads to decreased burnout and increased organizational trust, both of which contribute to higher levels of job satisfaction and nurses' perceived quality of care. The limitations of this study included a cross sectional design and an overrepresentation of nurses from smaller rural hospitals (69.3% of the sample). To determine the role that the overrepresentation may have played in the results, the models were tested without using the data from those hospitals and there was no significant difference. Another limitation was that there were two instruments used that had less than desirable reliability coefficients (0.83 and 0.73) (Laschinger, Shamian, and Thomson, 2001).

The above review of literature has covered a broad array of topics involving nurses' job satisfaction. The factors leading to job satisfaction and job dissatisfaction, the association between nurse satisfaction and patient satisfaction with nursing care, the correlation between empowerment and job satisfaction, and the relationship of a hospital's culture to job satisfaction have all been discussed. Herzberg's theory was not directly addressed in any of the articles that were reviewed, but many of the factors that he considered to be motivation and hygiene factors were studied.

Theoretical Framework

This research will be based on the Motivation Versus Hygiene theory written by Fredrick Herzberg in 1959. He studied the way in which job satisfaction was related to the concept that man has two separate sets of needs including the avoidance of pain (animalistic) and psychological growth or self-actualization (humanistic) (Herzberg, 1966). His research (1959) analyzed the individual factors which lead to job satisfaction and the factors which lead to job dissatisfaction, how these factors were related to each other, and how they affected the overall well-being of the individual.

The qualitative study that led to the development of the Motivation-Hygiene theory was conducted on a sample of 200 engineers and accountants from 9 different companies who

worked within 30 miles of Pittsburgh, PA (Herzberg, 1959). In face to face interviews, they were asked to give an example of a time in their life when they felt exceptionally good about their job and explain what reasons they had for feeling that way. The subjects were then asked to describe the events that took place which led to their attitudes about work being returned to what they perceived as normal. Finally, the whole interview process was repeated with the questions focusing on experiences that led to the participants feeling negatively toward their jobs and the events that helped to return their feelings to what they perceived as normal. The respondents were not limited as to the number of responses they gave and a total of 476 sequences of events were used in the study (Herzberg, 1966). Content analysis was performed to sort the data into categories and subcategories in the development of the analytic scheme.

Upon examination, there were two distinct groups of factors that effected either job satisfaction or job dissatisfaction. The first group was termed motivation factors, or satisfiers, because they actually determined the person's level of job satisfaction. In Herzberg's theory, these factors were related to long-term changes, psychological growth, and self-actualization which led to overall job satisfaction (1959). Motivation factors included "achievement, recognition, work itself, responsibility, and advancement" (Herzberg, 1966, pp. 72-73) and were associated with the actual work that was done by the subject. These satisfiers were commonly described by respondents as being related to job satisfaction and rarely described as being related to job dissatisfaction. The second group of factors were considered hygiene factors, or dissatisfiers, because they were commonly related to job dissatisfaction and rarely related to job satisfaction. Hygiene factors could temporarily change an individual's attitude toward their job and also play a role in avoiding unpleasantness, but the short term nature of these factors led to job dissatisfaction (Herzberg, 1959). These dissatisfiers included "company policy and

administration, supervision, salary, interpersonal relations, and working conditions" (Herzberg, 1966, p. 74) and these were associated with the environment or context in which the subject worked.

Summary

Although some of these articles examined very different topics, common themes were seen such as the importance of relationships with coworkers and empowerment on nurses' job satisfaction. These common themes, among other factors were examined in this study. Based on the theory of Motivation Versus Hygiene, nurse administrators could consider the identified motivation factors when implementing strategies to recruit nurses and retain them over long periods of time. They may also want take into consideration that hygiene factors such as pay raises are generally temporary answers to long-term problems.

CHAPTER III

The following sections of this proposal describe the methodology of the study. Also included in this chapter are the limitations of the study. The chapter concludes with a timeline for completion of the thesis.

Methodology

The methodology section of this proposal described the design of the study, the setting where it took place, the sampling design that was used, the instruments that were involved in data collection, and also the procedures that were followed for data collection. The statistics that were used for data analysis and a description of the way in which data were analyzed are also discussed.

Design

The study used a non-experimental, quantitative design with a convenience sample. More specifically, a predictive, ex post facto approach was taken to complete the research. This design was chosen in order to establish a relationship between the independent and dependent variables. The independent variables were the motivation factors and the hygiene factors. The dependent factor used for the study was nurse job satisfaction. All participants received the WQI and a demographic questionnaire. In addition, there was a small qualitative piece which included two narrative questions that were located on the demographic questionnaire.

Setting

This study was conducted at a medical center in a Southwestern town in West Virginia. The Medical Center was a 440 bed acute care facility. The sample was taken from the two acute care telemetry units in the medical center. Unit 1 had 22 beds and unit 2 had 21 beds. The units were very similar in staffing, physical layout, and availability of equipment. Nurses were frequently asked to float between these units to solve staffing shortages.

Sample

A convenience sampling design was used to obtain participants for the study from the two telemetry units. There were approximately 32 full-time and part-time RNs with various educational backgrounds and levels of experience who were eligible to participate in the study. Nurses who were not directly involved in patient care, the nurse managers, and those who work per diem were excluded from the study. All participants willing to complete the surveys and meeting the criteria described above were accepted for the study.

Instruments

Two instruments were used to gather data for this study. The first instrument was a demographic questionnaire designed by the researcher. See Appendix A. The questionnaire gathered information about the characteristics of the participants including age, gender, education, and experience in nursing. The demographic questionnaire also included two narrative questions. The first question inquired as to the subjects' job satisfaction and why they are or are not satisfied. The second question asked what aspects of their job most leads to their satisfaction or dissatisfaction with their job and why.

The second measure that was used in this study was the Work Quality Index (WQI). See Appendix B. The WQI was developed by Whitley and Putzier (1994) to measure the job satisfaction of nurses working in acute care settings. The tool was developed because the Joint Commission on Accreditation of Health Care Organizations set a standard that the needs, expectations, and level of satisfaction of staff should be addressed. The WQI is a 38-item, 7point Likert Scale that measures the satisfaction of nurses in relation to their work and work environment. The instrument has 6 subscales: (a) Professional Work Environment, (b) Autonomy of Practice, (c) Work Worth to Self and Others, (d) Professional Relationships, (e) Professional Role Enactment, and (f) Benefits. The internal reliability of the scale was established with a Cronbach's alpha of .94 for the entire WQI. The reliability of each scale was also determined: (a) Professional Work Environment, $\dot{\alpha} = .87$, (b) Autonomy of Practice, $\dot{\alpha} =$.84, (c) Work Worth to Self and Others, $\dot{\alpha} = .79$, (d) Professional Relationships, $\dot{\alpha} = .80$, (e) Professional Role Enactment, $\dot{\alpha} = .72$, and (f) Benefits, $\dot{\alpha} = .79$. Construct validity was established using the factor analysis method. Obtaining permission to use the WQI for this study was unnecessary because the instrument is found in the public domain to be used for research.

For the purpose of this study, the WQI was divided into two parts for analysis. The first part consisted of the WQI subscales that were associated with motivation factors. These subscales included (a) professional work environment, (b) autonomy, and (c) work worth to self and others. The second part consisted of the WQI subscales that were associated with hygiene factors. These subscales included (a) professional relationships, (b) role enactment, and (c) benefits. Interrator reliability for the categorization of the tool was established by a panel of experts in nursing administration.

Procedures

Following IRB approval, packets were distributed to every RN on the two telemetry units that met the criteria listed in the sample section of this paper. The surveys were placed in the nurses' mailboxes that were located in the conference room of their particular unit. There was also a poster on the bulletin board in each conference room that notified the staff of the survey and the distribution of the survey packets. The packets included a cover letter (see Appendix C), demographic questionnaire, WQI, and an envelope. Included in the cover letter was a general description of this research study and its purpose, basic instructions, a statement explaining that a brief written summary of the completed study will be available to all participants upon request, and the researcher's e-mail address and home phone number. The contact information gave participants a way to contact the researcher with any questions or concerns. The envelopes provided in the packets were used to ensure confidentiality. Participants sealed the surveys in the envelopes before placing them in a locked box labeled "survey packets" in the employees' conference room. The researcher then collected the surveys from the locked boxes personally.

Data were collected weekly by the researcher for a total of 3 weeks. In order to attain a high response rate among the participants, a second poster was placed in each of the conference rooms two weeks after the packets were distributed. The poster asked the portion of the sample who has not yet returned their completed surveys to please do so within the next week. A brief description of the research, its purpose, and the reasons that it is important to have a large sample size were included in the notice. It will also included the phone number and e-mail address of the researcher along with a message urging those who have not completed the survey to contact the researcher with any questions or problems relating to the research study.

Informed consent was implied by the participants completing and returning the two surveys. Confidentiality was maintained by asking the participants in the cover letter to not include their names or other identifying marks anywhere in the packet. Also, the packets were only be coded by the numbers 1 and 2 to differentiate between the two telemetry units. The sealing of the envelopes containing the completed surveys ensured that only the researcher will view the actual surveys. Hospital administration will not have access to the completed surveys; they will only have access to the final thesis.

Analysis of Data

The data collected from the surveys were coded and entered into the Statistical Package for the Social Sciences (SPSS), version 11.0 for analysis. The data were analyzed using both descriptive and correlational statistics. The answers to the two narrative questions were categorized in terms of common themes. Cronbach's Alpha was used to determine internal reliability.

Limitations

The major limitations of this study involved the sampling design and the small sample size. A convenience sampling design was used due to time and financial constraints. This weak form of sampling design coupled with a small sample size significantly limited the ability to generalize the results of the study to the entire target population. The results of the study were also difficult to generalize because the sample was limited to only one facility. The job satisfaction of these nurses could have been affected by their particular culture, the policies of their particular hospital, or the facility's administration. Another limitation was extraneous variables related to the setting of the study. Potential variables beyond the researcher's control include, but are not limited to environmental factors, stress levels, and mood of the respondent. Response bias was also a potential limitation because employees may have feared retaliation from hospital administration for low levels of satisfaction.

Summary

This chapter explained the methodology of the study including the design of the study, the setting where it took place, the sampling design that was used, the instruments and procedures that were used for data collection, and also a description of the way in which data was analyzed. The study used a non-experimental, quantitative design with a convenience sample was used. The independent variables were the motivation and hygiene factors and the dependent variable was nurse job satisfaction. The Work Quality Index and a demographic survey were given to approximately 32 registered nurses from a medical center in southwestern, West Virginia. The data was collected over a three week period and was analyzed using descriptive and correlational statistics. The chapter also explained the possible limitations of this study. This should enable one to better understand the results of the study and their generalizability.

CHAPTER IV

The final chapter of this thesis includes an analysis of the data, the results of the study, and a discussion of their meaning. Limitations of the study and recommendations for further research will also be given.

Data Analysis

The data collected from the surveys were coded and entered into the Statistical Package for the Social Sciences (SPSS), version 11.0 for analysis. The questionnaires were coded and analyzed using descriptive (means and standard deviations) and correlational (Pearson's r Correlation Co-efficicient) statistics. The answers to the two narrative questions were categorized and discussed in terms of common themes. Cronbach's Alpha was used to determine the internal reliability of the WQI for this particular sample. Chronbach's Alpha was also used to establish the reliability of the WQI when divided into the researcher generated categories of Motivation and Hygiene factors.

Demographic Data

Demographic data for the entire sample (N=23) was reported in Table 1. For data specific to each team, see Tables 2 and 3. The sample consisted of only 2 males (9%) and 21 females (91%). All 23 participants were of Caucasian ethnicity.

The ages of the participants varied from the 18-25 years old range to the 45-55 years old range. Equal numbers of participants were in the 18-25 category and the 26-35 category with 35% (n=8) of the sample in each category (Table 1). The majority of the sample (65%, n=15) reported being married. However, there were 6 respondents who reported being single (26%) and 2 (9%) who reported being divorced (Table 1).

Associates degrees were the most commonly reported level of education at 48% (n=11). There were also 7 participants (30%) with Bachelors degrees and 5 with nursing diplomas (22%). See Table 1. Their years of experience in nursing were quite varied. Years of experience ranged from 12 respondents (52%) falling into the 5 years or less category to 1 respondent (4%) falling in the 26-35 years category (Table 1).

There was one question on the demographic questionnaire that asked about the nurse's intent to leave their nursing unit, their facility, or the field of nursing within the next 5 years. Less than half of the respondents (n=9, 39%) plan to stay in their current job. None of the respondents plan to leave the field of nursing, but 6 respondents (26%) plan to leave their unit and 8 respondents (35%) plan to leave their facility (Table 1).

Narrative Data

The results of the narrative data have been analyzed and some themes have been found, however many of the responses did not fit into an identified theme (See Appendix D). It was apparent from the respondents' answers that some people had completely different feelings about the exact same thing. Answers to the first question (Are you satisfied with your job? Please explain.) ranged from yes because of management to no because of management. Themes found with yes explanations from the first question were scheduling, peer relationships, and pay. Common themes identified for explanations of no answers were scheduling, benefits, lack of appreciation, stress, and staffing/workload.

Themes were also identified for the second question: Which aspects of your work environment most affect your job satisfaction (which are the most valued)? While most of the themes were nurse-centered, one was patient-centered. It included comments like patient satisfaction, working with patients, and educating patients. Other identified themes were schedule, peer relationships/teamwork, management, pay, and feeling appreciated. *Reliability Data*

Reliability of the WQI was measured using Cronbach's Coefficient Alpha (see Table 4). The Cronbach's Alpha for the WQI's Total Score ($\alpha = .93$) and for the researcher developed subscales of Motivation Factors ($\alpha = .87$) and Hygiene Factors ($\alpha = .88$) yielded acceptable reliability coefficients. Four of the WQI's subscales yielded reliability coefficients above the acceptable .70 and two did not. The subscales found to be reliable in this study were Professional Work Environment ($\alpha = .84$), Autonomy of Practice ($\alpha = .79$), Professional Relationships ($\alpha = .78$), and Benefits ($\alpha = .86$). The subscales that did not meet the acceptable Alpha value were Work Worth to Self and Others ($\alpha = .40$) and Professional Role Enactment ($\alpha = .51$). These subscales most likely had low reliability coefficients because of the extremely small sample size.

Correlation Data

Pearson's *r* was used to examine the relationships between the Total Score of the WQI (job satisfaction) and Motivation and Hygiene Factors (see Table 5). Total Score significantly correlated with both the Motivation Factors (r = .946) and Hygiene Factors (r = .964). Motivation Factors and Hygiene Factors also significantly correlated with an *r* value of .826.

Results

The results of this study provided information about the sample's level of job satisfaction and the relationship between Herzberg's Motivation and Hygiene Factors and overall job satisfaction. The two specific aims identified in this study were addressed in the following paragraphs.

Assess the Level of the Respondents' Overall Job Satisfaction

The respondents rated their overall job satisfaction on a 7 point Likert Scale with 1 being not satisfied and 7 being satisfied. The mean level of satisfaction was 4.31 with a standard deviation of .78. This means that the respondents were satisfied just above the mid-point of the scale which was 3.5. This is consistent with other studies which have found that nurses typically have a moderate level of job satisfaction. The participants on Team 1 had a level of satisfaction with a mean score of 4.46; slightly higher than Team 2 with a mean score 4.08. Team 2 is also more strongly negatively correlated with the Total Score of the WQI. These differences between the teams were not statistically significant, but the absence of statistical significance does not mean that the difference does not exist and it is likely that the level of significance is due to the small sample size.

Examine the Relationship between Motivation and Hygiene Factors and Job Satisfaction

Both of the researcher generated subscales, Motivation and Hygiene, correlated closely with the Total Score. See Table 5. The Pearson's *r* Correlation Coefficients were .946 for Motivation-by-Total Score and .964 for Hygiene-by-Total Score. These are both statistically significant with the level set at .01. Since Motivation Factors and Hygiene Factors correlate almost equally with job satisfaction, nurses must be satisfied with both types of factors to be overall satisfied with their jobs.

Ancillary Findings

There were some correlations discovered during data analysis that did not meet a specific aim; however they were thought to be valuable and were discussed here. Two demographic categories (married nurses and nurses with Associates degrees) had strong negative correlations with the Total Score and the subscales Motivation Factors and Hygiene Factors (see Table 5). All but one of these correlations (Associate Degree-by-Motivation) are statistically significant. Since the sample is quite small, finding statistical significance is compelling evidence that married nurses and nurses with Associates degrees are less satisfied than other nurses.

Another demographic factor that had a negative correlation with job satisfaction was age. As age increased, the *r* values associated with satisfaction decreased. Older nurses were most dissatisfied with Hygiene Factors. This is not surprising given that Hygiene Factors takes into account pay and benefits. It has already been established that the pay scale for staff nurses levels off early in a nurses' career. Older nurses could also be worried about their financial security during retirement. Although none of the age-related correlations are significant, the researcher tends to accept them due the lack of statistical power with such a small sample size. See Table 5.

Nurses with Bachelors degrees were found to have a strong positive correlation with the Total Score and the subscales Motivation Factors and Hygiene Factors. While only one of the three correlations (Bachelors Degree-by-Hygiene) was statistically significant, all three correlations are large (see Table 5). Therefore, with such a small sample size, it was tentatively found that nurses with Bachelors degrees were more satisfied than other nurses.

Discussion

This study provided information that is important to nursing administration, nursing practice, and nursing education. It was found that the nurses in this sample were moderately satisfied with their jobs. The results also revealed that Motivation and Hygiene Factors had strong, positive, and almost equal correlations with overall satisfaction.

Implications for Nursing Administration

The implications of this research to nursing administration are substantial. Most obviously, nurse administrators will know that they need to do more to improve nurses' job

satisfaction since nurses are only moderately satisfied. The study of the relationship between Motivation and Hygiene Factors and nurse job satisfaction yielded nearly equal correlations. This tells nurse administrators that nurses value both hygiene factors and motivation factors. Nursing administration should therefore pay attention to all aspects of a nurse's duty, work environment, and compensation if they are trying to increase nurse job satisfaction. They could use other information from the study to know what areas to target. The study showed that nurses with Bachelors degrees were the most satisfied. It also showed that nurses who are married, nurses with Associates degrees, and nurses who are older are the least satisfied. This tells the nurse administrator to pay special attention to those categories without completely leaving out the others who are more satisfied. There are several ways to possibly improve satisfaction in the above identified categories such as flexible scheduling to target married nurses, incentives for attaining a Bachelors degree to target Associates degree nurses, and shorter shifts or enhanced retirement plans for older nurses.

Implications for Nursing Practice

Nursing practice could also be improved using the results of this research. Many nurses reported that peer relationships were the most important factor in their job satisfaction. Taking this into account, staff nurses could improve their own satisfaction by increasing their peer interactions, working on their communication skills, and making an effort to support their peers and make them feel appreciated. If an entire unit would try this; there should be a cyclic effect which could continue to increase the nurses' job satisfaction on the unit.

Implications for Nursing Education

The results of this study could impact nursing education by encouraging nurses who wish to be more satisfied with their jobs to obtain their Bachelors degrees and by encouraging administrators to offer assistance in doing that. This study has shown that nurses in this sample who have their Bachelors degrees are more satisfied than other nurses. Educators and nurses should consider this when counseling potential nurses who are in the process of deciding which educational track they should choose and also when counseling nurses who are considering furthering their education. It would be to the advantage of patients, administration, and other staff nurses to have more satisfied nurses working in healthcare.

Limitations

The limitations of this study mostly evolve around the sample. A convenience sampling design was used due to time and financial constraints. This weak form of sampling design in addition to a small sample size significantly limited the ability to obtain significant finding that could be generalized to the entire target population. The results of the study are also difficult to generalize because the sample is limited to nurses from only two cardiac units within one hospital. The job satisfaction of these nurses could have been affected by the Appalachian culture that is predominant in the area where they work or by the policies of their particular hospital. Another limitation is extraneous variables related to the setting of a nursing unit. Potential extraneous variables beyond the researcher's control include, but are not limited to, fatigue, stress, noise, and temperature. Response bias is also a potential limitation. Employees may fear retaliation from hospital administration for low levels of satisfaction.

Recommendations for Further Research

Although this study yielded important results about nurse job satisfaction, there is much more research to be done. One recommendation is to repeat this study using a much larger, randomized sample to improve the likelihood of achieving statistically significant results that could be generalized to a larger, more diverse population. Another exciting study would be to repeat Herzberg's original study using a large, randomized sample of nurses from across the country. This would ultimately reveal the usefulness of Herzberg's theory when dealing with nurses.

There are many other studies that could further nurses' understanding of nurses' job satisfaction. One would be to do a qualitative study that examines which factors are most important to nurses' job satisfaction. Further study to determine the role of nursing degree in job satisfaction would be valuable to nurse administrators when developing benefits related to education.

After reviewing the qualitative portion of this study; many other potential topics of future research were identified. One is to look at the importance of group cohesion and relationships among co-workers in job satisfaction. This was mentioned numerous times in the reasons why nurses reported being satisfied with their jobs. Other specific areas affecting job satisfaction which could be studied are stress levels, quality of formal leadership, patient ratio and acuity, scheduling, and benefits

Conclusion

This study analyzed nurses' job satisfaction through an examination of the relationship between Herzberg's motivation and hygiene factors and job satisfaction. The results of the study revealed that the nurses in the study had moderate levels of job satisfaction. It was also found that both Motivation Factors and Hygiene Factors almost equally correlate with overall job satisfaction.

As the nursing shortage continues to worsen, the satisfaction of nurses is of vital importance. Nurse administrators should pay attention to what their employees need from the organization and do everything within their power to meet those needs. The results of this

research should be used to develop policies that could lead to an improvement in nurses' job satisfaction and therefore better patient satisfaction, a decrease in the turnover of RNs, and increased profits for the organization.

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Variable	Frequency (f)	Percentage (%)
Gender		
Male	2	8
Female	22	92
Age		
18-25	8	33
26-35	9	38
36-45	4	17
46-55	3	13
56-65	0	0
66 or over	0	0
Ethnicity		
Caucasion	24	100
African-American	0	0
Hispanic	0	0
Asian	0	0
Other	0	0
Marital Status		
Single	6	25
Married	16	67
Divorced	2	8
Widowed	0	0
Level of Education		
Nursing Diploma	6	25
Associates Degree	11	46
Bachelors Degree	7	29
Masters Degree	0	0
Years experience in the Field of Nursing		
5 or less	12	50
6-15	9	38
16-25	2	8
26-35	1	4
36 or more	0	0
Miles Commuted to Work		
10 or less	9	38
11-30	13	54
31-50	2	8
51 or more	0	0
Intent to Leave (in the next 5 years)		
Your current nursing unit	7	29
Your current facility	8	33
The field of nursing	0	0
Not leaving	9	38

Table 1Demographic Data of the Sample (N=24)

1 12 3 7 1 2 0	Percentage (%) 8 92 23 54 8 15
12 3 7 1 2 0	92 23 54 8
3 7 1 2 0	23 54 8
7 1 2 0	54 8
7 1 2 0	54 8
7 1 2 0	54 8
1 2 0	8
2 0	
0	10
	0
0	0
13	100
	0
	ů 0
	0
ů 0	0
3	23
	69
	8
0	0
4	31
	23
	46
0 0	0
6	46
	46
ĩ	8
0	ů 0
ů 0	0
5	38
	62
	0
0	0
2	15
	23
	0
	621`
	3 9 1 0 4 3 6 0 0 6 6 1 0 0 5 8 0

Table 2Demographic Data of Team 1 (N=13)

Variable	Frequency (f)	Percentage (%)
Gender		
Male	1	9
Female	10	91
Age		
18-25	5	45
26-35	2 3	18
36-45	3	27
46-55	1	9
56-65	0	0
66 or over	0	0
Ethnicity		
Caucasion	11	100
African-American	0	0
Hispanic	0	0
Asian	0	0
Other	0	0
Marital Status		
Single	3	27
Married	7	64
Divorced	1	9
Widowed	0	0
Level of Education		
Nursing Diploma	2	18
Associates Degree	8	73
Bachelors Degree	1	9
Masters Degree	0	0
Years experience in the Field of Nursing		
5 or less	6	55
6-15	3	27
16-25	1	9
26-35	1	9
36 or more	0	0
Miles Commuted to Work		
10 or less	4	37
11-30	5	45
31-50	2	18
51 or more	0	0
Intent to Leave (in the next 5 years)		
Your current nursing unit	5	45
Your current facility	5	45
The field of nursing	0	0
Not leaving	1	9

Table 3Demographic Data of Team 2 (N=11)

	Ν	Cronbach's Alpha	Range	Mean	Standard Deviation
Total Score	22	.93	2.82-6.08	4.31	.78
Motivation	22	.87	2.88-5.76	4.27	.82
Hygiene	22	.88	2.52-6.33	4.33	.81
Professional Work Environment	22	.84	1.63-6.71	3.47	1.08
Autonomy of Practice	23	.79	3.2-6.8	5.04	.93
Work Worth to Self and Others	23	.40	3.25-7	4.87	.78
Professional Relationships	22	.78	2.13-6.5	4.38	.95
Professional Role Enactment	22	.51	3.4-5.8	4.45	. 81
Benefits	23	.86	2.25-6.5	4.18	1.05

Table 4Reliability Measures and Descriptive Statistics

	Total Score	Motivation Score	Hygiene Score	Married	Associates Degree	Bachelors Degree	Age
Total Score							
Pearson's r Correlation Significance (2-tailed)	1						
N	22						
Motivation							
Pearson's r Correlation	.946**	1					
Significance (2-tailed)	.000						
Ν	22	22					
Hygiene							
Pearson's r Correlation	.964**	.826**	1				
Significance (2-tailed)	.000	.000					
N	22	22	22				
Married							
Pearson's r Correlation	499*	523*	439*	1			
Significance (2-tailed)	.018	.012	.041				
N	22	22	22	24			
Associates Degree							
Pearson's r Correlation	503*	409	540**	.118	1		
Significance (2-tailed)	.017	.059	.010	.582			
N	22	22	22	24	24		
Bachelors Degree							
Pearson's r Correlation	.358	.222	.442*	130	590*	1	
Significance (2-tailed)	.101	.321	.040	.546	.002		
N	22	22	22	24	24	24	
Age							
Pearson's r Correlation	176	085	236	Data not	Data not	Data not	1
Significance (2-tailed)	.434	.708	.290	available	available	available	
N	22	22	22				24

Table 5 *Correlations between the Total Score, Motivation, and Hygiene Scores and certain Demographic Factors (N=22-24)*

** Correlation is significant at the 0.01 level (2-tailed) * Correlation is significant at the 0.05 level (2-tailed)

APPENDIX A

Demographic Questionnaire

For questions 1-8, circle the correct answer.

1. Age:

- a.) 18 25
- b.) 26 35
- c.) 36-45
- d.) 45 55
- e.) 56 65
- f.) 66 or over

2. Gender:

- a.) Female
- b.) Male

3. Ethnicity:

- a.) Caucasion
- b.) African-American
- c.) Hispanic
- d.) Asian

4. Marital status:

a.) Single

b.) Married

c.) Divorced

d.) Widowed

e.) Other, please specify

5. Level of education:

- a.) Nursing Diploma
- b.) Associate's degree
- c.) Bachelor's degree
- d.) Master's degree

6. Years experience in the field of nursing:

- a.) 5 or less
- b.) 6-15
- c.) 16 25
- d.) 26 35
- e.) 36 or more

7. Miles you commute to work:

- a.) 10 or less
- b.) 11-30
- c.) 31 50
- d.) 51 or more

8. Do you intend to leave (in the next 5 years):

- a.) Your current nursing unit
- b.) Your current facility
- c.) The field of nursing

9.) Are you satisfied with your job? Please Explain. _____

10.) Which aspects of your work environment most affect your job satisfaction (which are

the most valued)?

APPENDIX B

Work Quality Index

	NOT	SATISF	FIED			SATIS	FIED
1. The work associated with your position allows you to make contribution to:							
a.) The hospitalb.) The professionc.) You own sense of achievement		2 2 2	3 3 3	4 4 4	5 5 5	6 6 6	7 7 7
2. You receive adequate praise for work well done from:							
a.) Your peersb.) Hospital physiciansc.) Nursing administration		2 2 2	3 3 3	4 4 4	5 5 5	6 6 6	7 7 7
3. The work associated with your position provides you with:							
a.) Opportunity to use a full range of nursing skillsb.) A variety of clinical challengesc.) The opportunity to be of service to others		2 2 2	3 3 3	4 4 4	5 5 5	6 6	7 7 7
4. The nursing practice environment:							
a.) Allows you to make autonomous nursing care decisionsb.) Allows you to be fully accountable for		2	3	4	5	6	7
those decisionsc.) Encourages you to make adjustments in your nursing practice to suit patient needs		2	3	4	5	6	7 7
d.) Provides a stimulating intellectual environment.	1	2	3	4	5	6	, 7
 e.) Provides time to engage in research as you want. b) Duration to the full state of the s	1	2	3	4	5	6	7
f.) Promotes a high level of clinical competence on your unitg.) Allows opportunity to receive adequate	1	2	3	4	5	6	7
respect from nurses on other units	1	2	3	4	5	6	7

	a.) Allows you to have a voice in policy making for nursing service	1	2	3	4	5	6	7
	b.) Allows you to have a voice in overall	1	2	3	4	5	6	7
	hospital policy making	1	2	3	4	5	6	7
	c.) Facilitates patient care							
6.	You receive:							
	a.) Enough time to complete patient physical care tasks	1	2	3	4	5	6	7
	b.) Enough time to complete indirect patient care tasks.	1	2	3	4	5	6	7
	c.) Support for your work from nurses on other shifts	1	2	3	4	5	6	7
	d.) Support from your peers for your nursing decisions	1	2	3	4	5	6	7
	e.) Support from physicians for your nursing decisions	1	2	3	4	5	6	7
7.	Good working relationships exist between you and:							
		1	2	3	4	5	6	7
	a.) Your supervisor	1	2	3	4	5	6	7
	b.) Your peersc.) Physicians	1	2	3	4	5	6	7
8.	Nursing service:							
	-	1	2	3	4	5	6	7
	a.) Gives clear direction about advancement		_			_		_
	b.) Provides adequate opportunities for	1	2	3	4	5	6	7
	advancement c.) Decides advancements for nurses fairly	1	2	3	4	5	6	7
9.	Your job offers:							
		1	2	3	4	5	6	7
	a.) Opportunity for professional growthb.) Satisfactory salary	1	2	3	4	5	6	7
	c.) Adequate funding for health care premiums	1	2	3	4	5	6	7
	d.) Adequate additional financial benefits other than salary	1	2	3	4	5	6	7
	e.) A satisfactory work hour pattern (eight	1	2	3	4	5	6	7
	hour, ten hour, and so forth)	1	2	3	4	5	6	7
	f.) Adequate vacation	1	2	3	4	5	6	7
	g.) Adequate sick leave	1	2	3	4	5	6	7
	h.) Adequate inservice opportunities	1	2	3	4	5	6	7

5. The hospital organizational structure:

APPENDIX C

TITLE OF STUDY:

Factors That Most Influence Job Satisfaction among Cardiac Nurses in an Acute Care Setting **OVERVIEW:**

There is a significant nursing shortage in the US. Administrators need to know which methods will be effective in recruiting and retaining nurses. The purpose of this study is to determine cardiac nurses' level of job satisfaction through an examination of the relationship between Herzberg's motivation and hygiene factors and the nurses' overall job satisfaction. The study will use a non-experimental, quantitative design with a theoretical framework based on Fredrick Herzberg 's Motivation Versus Hygiene Theory. The data will be collected over three weeks and will be analyzed using descriptive and multiple regression statistics. The research will be used to develop a Master's Degree Thesis.

PARTICIPANTS' RIGHTS:

Subjects have the right to not participate. They are anonymous aside from the packets being marked Team 1 or Team 2. Subjects also have the right to a summary of the results of the study if requested.

INSTRUMENTS & INSTRUCTIONS:

Two instruments will be used for this study. The first instrument is a demographic questionnaire that assesses the characteristics of the participants. Please circle the letter next to the answer for each question. The demographic questionnaire also has two narrative questions. Please answer these questions by writing or typing out the answers. The second measure that will be used is the Work Quality Index (WQI); a 38-item, 7-point Likert Scale that measures the satisfaction of nurses. Please rate each item by circling a number from 1 (not satisfied) to 7 (satisfied). Seal the completed surveys in the envelopes provided in the packet and place them in the locked box in the conference room labeled job satisfaction surveys for the researcher to collect.

CONTACT INFORMATION:

If you have any questions, contact LaShonda Bare at 304-522-0896 or bare2@marshall.edu.

APPENDIX D

Answers taken from narrative questions; grammar was not corrected.

Narrative Question #1: Are you satisfied with your job? Please Explain.

Team1

- In nursing yes, but nursing at (this facility) no. Feels like hired help. That you should be happy to work here. Incentives are horrible and retirement is almost non-existent.
- Yes
- Yes fair scheduling
- For the moment yes, unless equipment or supplies become scarce.
- Not really. It's a difficult living very exhausting. If I had a choice I would be in a totally different environment.
- Yes, rewarding and challenging.
- Yes I am satisfied with my job with emphasis on pay and benefits. I like flexible hours and I enjoy my coworkers.
- Yes
- This job has a lot of stress associated with it; but the money compensates some.
- I love being a nurse, but sometimes I become frustrated when you are so overwhelmed that you can't give the attention to your patients that they need.
- Yes, like the people I work with, schedule is okay most of the time.

Team 2

- As with any job there are good & bad days, positive negative aspects but overall I am happy with my job.
- No, not always (sometimes). Big patient load at times (most times). Have to work a lot of weekends. Long hours.
- No. Conglomerated schedules and lack of appreciation to nurses are huge downfalls. Extreme lack of proper management.
- To some degree.
- I'm content with my job, but not satisfied. I really don't think you can be totally satisfied with your job. One day can be good but the next can overwhelm you.
- Yes.
- I like my job, at times this unit is too fast pace. I would rather work 8 hour shift, but you can't work only day shift. 7A-7P in next best.
- Nursing is a very hard profession, thankless, and getting harder to accomplish goals.
- Yes, although this is a new field for me & the transition has been difficult.

Narrative Question #2: Which aspects of your work environment most affect your job satisfaction (which are the most valued)?

Team 1

- Working with patients and trying to get them better. What kills me is when a doctor is doing a half a-- job. Once a day is not enough to really see a patient.
- Schedule, competent peers that are enjoyable to work with ability to provide care needed ie: time, staffing.
- People that I work with, the manager.
- For the most part it's either the other employees you work with in the immediate unit you're on and you value greatly the ones you can depend on.
- Fairness, teamwork
- Money, coworkers and schedule
- Pay wages are fair, hours are good
- Actual the team, or coworkers on the shift make the day better or worse
- Patient satisfaction
- People I work with

Team 2

- Feeling appreciated. Well staffed.
- Staffing, hours, acuity of each patient.
- Teamwork, strong leadership from a management standpoint.
- Relationships with doctors, relationships with co-workers, overall environment of nurses' station.
- Conversing with the patients and spending time explaining the things that are going on with them, so that they understand. Most have many questions to ask, but usually you have to give shortened versions. No one has the time to do all the teaching you learn about in school. This is "Real World Nursing," that discourages nurses.
- I feel comfortable working with cardiac patients; compared to working with patients of an alternative disease process.
- Schedule at times, no matter how many years you work at (this facility) you will always have to work weekends & holidays and some midnight shifts if you are a staff nurse. Overall it's a good place to work. Need to listen to staff and make some policy changes.
- Satisfaction on job well done.
- Scheduling is #1. It is difficult to not have schedule far enough in advance to make plans & to not have a regular cycle of schedule.

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LaShonda Leigh Bare

Qualifications	 Experience with diverse patient populations in various clinical settings Solid academic background in both the classroom and clinical areas Experience working in St. Mary's School of Nursing as part of the MSN practicum program through Marshall University Excellent communication skills including public speaking and giving academic presentations Excited about the opportunity to guide the nurses of the future 						
Education	August 2004 (anticipated) M.S., Nursing GPA: 4.00	Marshall University	Huntington, WV				
	May 2002 B.S., Nursing • GPA: 3.77	Marshall University	Huntington, WV				
Work experience	 education, passing media Act as team leader to coordinate the end of the tele sector of the tele telemetry units, the cardinate orthopedics, neurology, at May 2000 – May 2002 Nurse Extern 	St. Mary's Hospital including performing assess cations, and assisting with activ ordinate all aspects of the patier metry float pool which inclu ac step-down unit, and also floa and other units when needed St. Mary's Hospital e, patient education, and ensure early every unit in SMMC	ities of daily living nts' care ides working on ating to oncology, Huntington, WV				
Activities & Honors	 Sigma Theta Tau, Nu Alp WV Nurses Association Gamma Beta Phi (Honor John Marshall Scholar at 	Society and Community Service	ce Organization)				
References	Available upon request						