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Predictors of Job Satisfaction and Burnout in Travel Nurses

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Predictors of Job Satisfaction and Burnout in Travel Nurses

By

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Abstract

This study examined various individual and work environment characteristics and their influence as predictors of travel nurse job satisfaction and burnout. In addition it described travel nurses; a population of nurses that has not been previously studied. An explanatory sequential mixed methods design was used in order to take advantage of the exploratory nature of the qualitative portion in describing the attitudes and motivations of travel nurses in detail; and to further explain the findings from the quantitative portion of the study. The quantitative portion of the study used a descriptive correlational methodology with secondary data analysis of a cross-sectional sample responding to an on-line self-administered survey. A 28% response rate was achieved with the return of 1,231 completed surveys. The results of the analyses are described in two manuscripts. The first is entitled: *Burnout, Job Dissatisfaction, and Intent to Leave Among Travel Nurses.* The Copenhagen Burnout Inventory was used to measure burnout. Burnout in travel nurses was significantly related to their age and the number of patients under their care. Magnet hospital designation was the only significant predictor of job satisfaction in travel nurses. The second manuscript entitled, *A Qualitative Analysis of the Attitudes and Motivations of Travel Nurses* reported the findings of telephone interviews completed with 17 travel nurses. The article described the experiences of travel nurses, why they made the decision to enter travel nursing and their perceptions of the rewards of working as a travel nurse. Travel nurses believed that the variety of experiences at different facilities and in different places improved their nursing skills and self-confidence such that they became a better nurse. A third manuscript was developed from a separate dataset related to job satisfaction of travel nurses. The title of this final manuscript is:

Travel Nurse Job Satisfaction: What Nurse and Hospital Characteristics Matter? The results support the concept that Magnet hospital designation contributes significantly to the job satisfaction of travel nurses. In all, this dissertation documents new evidence about travel nurses.

Dedication

This work would not have been possible were it not for the support of my family: my husband, Nelson, and my 4 children, Allyn, Jenna, Ben and Gabe. They endured my weekends and evenings spent reading, researching and writing; and put up with my requests to gain their input on some of my questions and positions. I also thank my parents, my sister, and my brother for their endless encouragement.

My committee was exceptional. Dr. Connelly advised me very early on that I could move forward with my research independently. That advice led to the development of a large research database from which I hope to write many manuscripts that will help educate nurse and hospital leaders about the use of supplemental nurses. I admire Dr. Aiken for her many accomplishments and contributions to the science of nursing. I am honored that she accepted my invitation to participate on my committee even though I know how very busy she is. Her guidance and assistance over the past couple of years is so very much appreciated. In addition, I am so appreciative of Dr. Georges' efforts on my behalf. Her style of teaching has inspired me. Through gentle suggestion, she is able to influence me to examine more deeply my ideas and positions on topics. This self-

exploration is an important part of scholarly work and has influenced the development of my ideas on my topic of study.

I would not have thought to enter the USD program had it not been for the advice of Dean Hardin. After a meeting with her on another topic, I was compelled to ask her about the graduate nursing programs available at USD; looking for her advice as to which one would be right for me. She responded that the Executive Nurse Leader program would be perfect for me to earn a Master's degree and following that I could just drop right into the PhD program. At the time, I had no intention of pursuing a PhD, worried that it would just be too much. But as I became involved in my academic pursuits I realized that I could manage everything, and within my first semester made the commitment to continue on for my PhD. Thank you, Dean Hardin.

Finally, sincere thanks and appreciation goes to Susan Nowakowski, my boss at AMN Healthcare and my colleague for more than 20 years. Her support and encouragement were instrumental in my initial decision to continue my education. That support continues today. Thank you.

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Chapter 1

Introduction

The current nursing shortage is not projected to end anytime in the next two decades. In fact, even though forecasts of the shortage have tempered somewhat due to the economic recession of 2008/2009, a recent projection estimates the shortage at roughly 260,000 nurses in 2025 (Buerhaus, Auerbach, & Staiger, 2009). Underlying demand factors, primarily the aging baby boomer population and the imminent potential for healthcare reform bringing healthcare access to millions, continue to pressure educational programs to produce more nurses in order to meet healthcare demands for the next twenty years. Given a sustained and potentially severe shortage of nurses, it becomes practical and even necessary to learn more about why nurses choose the career, how satisfied they are in their jobs and more importantly what causes them to be dissatisfied and leave their jobs and/or the profession altogether.

Travel nurses make up only a very small portion of the hospital workforce, yet their numbers have been growing in recent years. According to Staffing Industry Analysts, (an industry research analytic firm) there were roughly 18,000 travel nurses in 2007 (Osborne, Calvi, & Hessinger, 2007). Of nurses living in California, 3% work for a registry or per diem agency and 1.2% work as a travel nurse. For these nurses, wages were the predominant reason for working as a temporary nurse, but over half reported that they work temporarily in order to have better control over their work schedule (California Board of Registered Nursing, 2008). Developing a better understanding of the

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motivations and characteristics of travel nurses related to their job and career satisfaction may be an important aspect to understanding the current levels of high job dissatisfaction and intent to leave reported in the literature (Aiken et al., 2001).

Purpose of the Study

The purpose of this study was to examine and describe the characteristics and attributes of travel nurses and their work environments, related to level of burnout and job satisfaction.

Specific Aims

The primary aims were to:

1) Determine the relationship between Magnet hospital designation and level of job satisfaction in travel nurses.

2) Examine potential predictors of job satisfaction, intent to leave, and burnout among travel nurses.

3) Describe the characteristics of travel nurses and the reasons why a nurse might choose to work as a travel nurse.

Research Questions

The following specific research questions were examined in this study:

1) What is the relationship between Magnet hospital designation and the level of job satisfaction in travel nurses?

2) What variables exert the most influence in predicting burnout and job dissatisfaction in travel nurses?

3) What are the characteristics of travel nurses? What are the reasons and relative importance of the reasons that a nurse chooses to become a travel nurse?

Definitions

Several terms and related concepts were central to this study. In some cases different definitions of these concepts exist. The definitions below were determined most appropriate to this research study.

Assignment: fixed length contract specifically for travel nurses.

Burnout: "a state of physical, emotional and mental exhaustion that results from long-term involvement in work situations that are emotionally demanding" (Schaufeli & Greenglass, 2001) and "the attribution of fatigue and exhaustion to specific domains or spheres in the person's life" specifically personal life, work, and work with patients (Kristensen, Borritz, Villadsen, & Christensen, 2005).

Contingent worker: this term is most frequently used in the non-healthcare literature. It commonly refers to short-term or fixed-term contract workers.

Job satisfaction: an attitude that is "a positive (or negative) evaluative judgment one makes about one's job or job situation" (Weiss, 2002).

Magnet designation (Magnet): a voluntary and earned recognition for hospitals awarded by the American Nurses Credentialing Center (ANCC) for meeting specific requirements as defined in the program. The designation is nursing-centric and acknowledges aspects of nursing

excellence within an organization that are associated with the ability to recruit and retain a high quality nursing workforce.

Nurse-assessed quality of care: an evaluative judgment by a nurse about the quality of patient care (usually time bound).

Registry (or per diem) nurses: nurses employed by a third party agency and supplied to healthcare facilities on a shift-by-shift basis. Typically, the nurses are assigned to the hospital based on skills and availability. There is no selection process undertaken by the hospital nurse manager.

Supplemental nurses: this is a broad term that encompasses any type of nurse that is supplemental to core staff (core staff being those nurses that are employed full time in a regular position) and includes internal per diem or casual nurses, float pool nurses, and external agency nurses; either registry or travel.

Temporary nurses: nurses employed by a third party agency rather than the hospital in which they work. This may include travel nursing and registry work. Other terms commonly used for temporary workers are "contingent" or "supplemental". In this paper, the definition of temporary nurses does not include hospital-employed nurses that are per diem or casual, though they may be considered temporary in other reports.

Travel nurses: nurses employed on short-term temporary work assignments by an agency that specializes in offering these types of assignments. The pertinent differentiation between travel and registry is that the work assignments are arranged in advance, they are typically three

months in duration, and the nurses are selected by the hospital nurse

manager following a review of application and supporting materials, and a

telephone interview.

Conceptual Framework

The study was grounded in a conceptual framework that describes the

relationships between the work environment in a hospital, specific operational

characteristics within that setting, and various outcomes; including patient quality care

and patient satisfaction, as well as nurse job satisfaction (Aiken, Sochalski, & Lake,

1997). The framework is a type of structure-process-outcome model (Donabedian,

1982).

The model describes "organizational forms" at both the hospital level and the unit

level. These forms are programs established for specific purposes that can be tested

against outcome results in both patients and nurses. The best example of a hospital form

is the Magnet Recognition Program®; a program that defines and describes attributes of

hospital organizations that serve to attract and retain qualified and competent nursing

staff. At the unit level, these forms are likely to be expressed as specialty units that have

developed a distinct structure and culture that serve both nurses and patients positively.

The Magnet designation status of a hospital facility was an independent variable in this

study.

"Operant mechanisms" as defined in Aiken et al's (1997) conceptual framework

are nursing level characteristics that may or may not be fully developed within the

organization. The degree to which these mechanisms are implemented positively

influences the outcomes of interest, namely patient care quality and nurse job satisfaction.

Some of these nursing characteristics are autonomy, control, and relationships with physicians. Autonomy is the ability of nurses to exercise their judgment in a timely manner. Control is related to the ability of nurses to make decisions related to resources and other practice elements that serve to enhance the quality of patient care. Good nurse-physician relationships are viewed as essential for nurses to accomplish sufficient information exchange related to the clinical care of their patients. Attributes of the organization influence the operant mechanisms under which nurses accomplish their work. The degree to which these mechanisms are achieved will influence nurse job satisfaction, burnout and safety as well as patient satisfaction, complications and mortality.

Finally, the nurse and patient outcomes evolve into organizational outcomes by specifically driving staff stability in the form of reduced turnover and improved morale, as well as cost implications related to shorter lengths of stay and better patient outcomes. Soon these organizational cost outcomes will become more transparent as they result in Medicare reimbursement penalties for hospital-acquired illnesses and/or injury to patients.

Using surveys of nurses currently or recently on travel assignments, this study examined portions of the described conceptual framework through analysis of the following independent variables: assignment at a Magnet designated facility or one that is "on the journey" to Magnet designation, staffing levels as a means of gauging nurse's control over their environment, and survey questions about the nurses perceived job control and autonomy. Outcome variables of nurse burnout and job satisfaction were measured through specific survey questions and instruments designed for that purpose. In

addition, a specific question targeted nurse-assessed quality of patient care as a proxy for quality of the work environment. There were many other variables under examination in this study. They will be presented in a later chapter.

The unit level models with associated nursing operant mechanisms depicted in the conceptual model were not examined in this study. Nor were there any outcome variables in the study that specifically explored organizational cost outcomes.

Significance

Between 2007 and 2008 an additional 243,000 full time equivalent (F.T.E.) RN positions were added within the hospital sector (Buerhaus et al., 2009). The availability of travel nurse jobs has diminished because of the large numbers of nurses returning to the workforce in response to the economic recession. Seemingly, the nursing shortage is in a lull and the need to employ travel nurses is also down. Experts caution becoming complacent amidst these unusual circumstances as the long term drivers of demand for nurses remain strong; namely, the growing volume of aging baby boomers and nursing faculty shortages resulting in thousands of qualified nursing candidates being turned away from schools every year. Nearly 40,000 qualified candidates were turned away from baccalaureate programs in 2009 (American Nurses Association, 2009). Nursing remains in the midst of its most significant shortage in decades, therefore, the satisfaction or dissatisfaction of nurses remains of great concern to nurse administrators in hospitals.

Nurse job satisfaction has been studied extensively. As nursing shortages have waxed and waned since the 1980's, it is common to see a spike in research activities related to job satisfaction as the shortage reaches a peak, and then, a reduction of such research when shortages are less serious. Dr. Peter Buerhaus (2009) describes the

relationship of F.T.E. nurse job growth (associated with a lessening of the shortage) and economic recession quite clearly in his recently published re-forecast of the current nursing shortage.

When economic growth slows resulting in lower levels of GDP (gross domestic product) and high national unemployment, the growth rate in RN F.T.E.'s increases. This pattern has repeated itself over the last 4 economic recessions. In the 1981-1983 recession, GDP fell to 1.7%, national unemployment rose to 8.4% and hospital RN F.T.E.'s increased by 3.5%. Similar trends occurred in the recessions of 1991-1992 and 2001-2003. In the recessionary years 2007-2008, GDP fell from 3.2% to 1.7%, the national unemployment rate was 5.3%, and growth in hospital RN F.T.E's was the highest in 2 decades at 8.6%. Of course, since Buerhaus's (2009) article was published, national unemployment has risen to double digits in many areas (Bureau of Labor Statistics, 2010).

Use of temporary nurses by hospitals follows a similar pattern, though lagging the effects of a recession. Staffing Industry Analysts began reporting on healthcare staffing growth in 1998. The healthcare staffing industry experienced strong growth from 1999-2002 (recessionary years for comparison were 2001-2003). Growth peaked at 26% in 2002, however, beginning in 2003, the recessionary lag effects of the improved hospital RN F.T.E.'s resulted in negative growth for 2 years (-9% in 2003 and -3% in 2004). Following the same pattern, industry growth continued from 2005-2008 (2.5%, 6%, 6% and 1% respectively) and then in 2009 projected growth was -23%. Growth expectations for 2010 are forecasted to be negative again, though not as severe as the 23% shrinkage in 2009 (Osborne et al., 2007).

Temporary nurses are used in strategic staffing plans to augment staffing resources in the following situations: coverage of leaves of absence and other time off, seasonal census fluctuations, unexpected census fluctuations such as those seen in a crisis or disaster, and to cover while permanent staff are recruited and trained. In a shortage situation the use of temporary nurses may increase dramatically as they become a more standard resource for coverage while hospitals are recruiting permanent nurses. Often during shortages, permanent nurses can not be found, and the use of temporary nurses continues and potentially grows. On the other hand, during recessionary periods when nurses who were previously retired, working part time, or not working in nursing, return to the workforce to fill the growth in RN F.T.E.'s; the need for temporary nurses declines. This decline can be quite dramatic as in the case of the most recent severe recession.

Even though hospital nursing vacancies have declined (AMN Healthcare, 2009), it is almost certain that as the country begins to emerge from the recession and unemployment eases; nurses who have re-entered the workforce or delayed retirement will return to their original plans, resulting in a quick and significant increase in vacancy. When this happens, the more frequent use of temporary nurses will again become necessary in order to have adequate staffing resources available to provide high quality and safe patient care.

Travel nurses are committed to a single unit for the duration of their contract, therefore, they have attributes that impact quality more positively than registry nurses. Primarily, these attributes are continuity of care, becoming part of a unit team, assimilating the organization's values, and familiarity with hospital protocols and

procedures. Studying and reporting on travel nurse characteristics will help identify aspects of this field that are attractive to nurses and augment our understanding of the various job opportunities that nurses have and their impact on job satisfaction and burnout. Temporary nurses are an important part of any strategic staffing solution and the role that they play in nursing shortages is crucial. Understanding what drives the satisfaction of temporary nurses and specifically travel nurses is critical to achieving and maintaining an adequate nursing workforce that can ultimately deliver desirable patient care outcomes.

Chapter 2

Review of the Literature

The United States and the entire world are in the midst of the most significant shortage of nurses ever. While the current economy has tempered the sense of impending doom, projections of the shortage in the next 10 to 15 years remain extremely high (Buerhaus et al., 2009). Adequacy of staffing, and the quality of the work environment have been linked consistently with nurse job satisfaction as well as patient outcomes (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Mark, Harless, McCue, & Xu, 2004). Yet, the solution is not simply one of hiring more nurses. The nursing shortage prevents sheer availability of resources to accomplish this, and the expense of the numbers of additional nurses needed precludes a hospital organization from using volume as a simple solution to improve the quality of care.

This chapter will reveal the literature as it pertains to work environment contributions to outcomes for both nurses and patients with a specific focus on travel nurses where possible. First, the literature surrounding temporary staffing will be examined; followed by a review of burnout and job satisfaction (the dependent variables under study). Next, the various independent variables will be discussed; (a) demographic characteristics of nurses including age, gender, race and marital status, (b) qualifications of nurses – specifically education and years of experience, (c) characteristics of employing hospitals such as type of facility, size, setting (urban versus rural) and staffing effectiveness, and (d) quality of the work environment as measured by two proxy

variables – Magnet status of the employing hospital and nurse-assessed quality of care. Finally, a conceptualization of several explanatory models will provide grounding for the study and a possible alternative theory.

Temporary Staffing

In a review of the literature certain aspects about temporary nurse staffing were discovered through searching various article databases. There is very little reported research on the topic of temporary nurse staffing in the United States. In fact, only two research reports were found in the CINAHL database under the search for temporary nurses. No research articles were found when searching for travel nurses. Therefore, expanding the search beyond "nursing", the "United States" and the word "temporary" was necessary.

Contingent workers.

Reports from European and Asian countries dominate the literature on contingent workers (De Cuyper & De Witte, 2007; Jalonen, Virtanen, Vahtera, Elovainio, & Kivimaki, 2006; Van Dyne & Ang, 1998; Yeh, Ko, Chang, & Chen, 2007) both inside and outside of healthcare. In the United States, between 1.8% and 4.1% of total employment is occupied by contingent workers. This volume has been relatively stable since 1995, when it was first measured (Bureau of Labor Statistics, 2005). In comparison, the rate of contingent employment in European countries is much higher and continues to grow. While it varies by country, the rate of employment of contingent workers is between 4% and 33% with an average in double digits (OECD, 2002). Given the differences in volume of contingent workers in the United States and Europe, it is understandable that most reports about contingent workers originate in Europe.

Typical reasons that workers choose contingent over permanent employment are; flexibility, to keep current in their skills, and dissatisfaction with their current job - often politics in the workplace (Rassuli, 2005). Temporary work for nurses that can be mobile, offered opportunities to experiment with various jobs as a means of finding the best fit (Goodman-Bacon & Ono, 2007). Temporary nurses were younger, more often single and more likely without children in comparison to nurses in permanent positions (Goodman-Bacon & Ono, 2007; Yeh et al., 2007).

Attributes of contingent workers.

Some surprising results were reported when researchers examined contingent workers' attitudes about their work and their employers. These results have clear implications for employers that use contingent workers in terms of providing motivation to achieve top performance. Nearly all of these reports studied non-healthcare contingent workers and many were external to the United States. Contingent worker perceptions were influenced by comparisons between the many employers for which they worked, while permanent workers had limited comparison points (Allan & Sienko, 1998). Temporary workers that had higher satisfaction with their assignment and those that voluntarily chose temporary work exhibited higher levels of performance than those who were dissatisfied or those that chose to work temporarily because other options were more distasteful (Ellington, Gruys, & Sackett, 1998).

Some research findings were in conflict. As an example, a Belgian study found that the relationship between job insecurity and both job satisfaction and organizational commitment was more negative for permanent employees than for temporary ones (De Cuyper & De Witte, 2007). In contrast, others described temporary employees (nurses

specifically) as having more job stress and less organizational and occupational commitment than permanent employees (Yeh et al., 2007).

The psychological contracts that temporary employees had were different than those of permanent employees. Temporary employees didn't have an expectation of job security (in their psychological contract with their employer) so when this contract was broken and the job ended, it didn't have a negative effect on them as it would on a permanent employee who had an expectation of job security (De Cuyper & De Witte, 2007). This concept was discussed in much more detail in organizational commitment-related research specifically examining permanent employees in which several theories were proposed to explain varying levels of commitment. Applying the theories of organizational commitment to temporary employment is an emerging area of research activity.

Nurse staffing strategies.

Staffing in hospitals poses a constant challenge. Labor expenses generally average about 50% of a hospital's budget and nursing typically occupies the largest portion of total labor expense. Nursing administrators prefer to staff fully with their own regular staff because they are more knowledgeable about the hospital's policies, are theoretically aligned with the mission and values, provide more consistency for patient care, and are able to develop strong relations with the interdisciplinary team members. The ability to staff with regular staff at all times is hampered by the current nursing shortage making recruitment difficult; and by work environments that pose challenges in terms of providing satisfying experiences for nurses. Therefore, other staffing strategies must be employed. Some of these strategies exist internally; for example, using overtime and

internal float pools. Both of these mechanisms can and should be employed as part of an overall strategic staffing plan, but both have potential negative consequences as well. For example, overtime can be used excessively. When this occurs, staff morale may deteriorate, burnout may increase resulting in turnover, and errors in patient care related to fatigue may occur (Rogers, Hwang, Scott, Aiken, & Dinges, 2004).

Among the approaches that hospitals use to manage staffing levels are; overtime, float pool nurses, and casual or per diem hospital staff. These resources are limited and finite; and when overused can contribute to morale issues that may result in turnover (Faller, 2008). Using a balanced approach that includes the utilization of temporary nurses to truly supplement a solid core of permanent nurses is an effective strategy in consistently achieving adequate staffing levels that produce quality patient outcomes (Prescott, 1986). Hospitals with higher levels of supplemental nurses were associated with higher quality outcomes suggesting that adequacy of nursing resources is of importance in regards to patient care quality (Aiken, Xue, Clarke, & Sloane, 2007).

At some point, nursing administrators turn to temporary nurses to supplement regular staff. Temporary nurses can be requested on a day-by-day basis or on a contract basis (travel nurses) for a specified amount of time. Travel nursing as an industry is not new. It initially started during a previous nursing shortage in the late 1970's. Nurses are recruited from across the United States and placed for 13-week work "assignments" in hospitals.

Travel nurses.

In the late 1990's, there was considerable consolidation of companies within the nurse staffing industry along with significant growth. This growth created a more visible

and quite different opportunity than the original concept for travel nursing that was strictly associated with seasonal census changes. Travel nurses have the flexibility to move around the country according to a plan that they create and command. These short work opportunities abound in a shortage situation, creating a climate that tends to draw even more nurses to test this new way of working. To many nurses who may feel burned out or frustrated by nursing in their current position, travel nursing can be a way to step away from the pressures of a full time position commitment into a more exciting temporary diversion.

Attitudes of hospital nursing administrators about travel nurses cover a continuum from high appreciation and recognition of the value of their services, to feeling pressured by the shortage and having no alternative but to resort to the use of travel nurses. As such, travelers are often viewed as a "necessary evil" rather than a valuable asset that can be utilized strategically to improve patient care outcomes. While nursing administrators vary in their feelings about the use of travel nurses, often they will vocalize the concern over the added expense and will always prefer to hire their own staff rather than use a traveler. Frequently, the concern of lower quality of care is associated with the use of travel nurses, though this concern finds no evidence in the literature.

Travel nurses are often not considered part of the unit's team, even though they are scheduled for full time hours on their assigned unit and their schedule is in the control of the unit manager. Travelers are typically contracted for 13-week periods during which they can become a fully functioning team member. Often they are able to provide fresh insight as to a hospital's effectiveness in embracing new staff in their setting. Travel nurses provide consistency of care not found in other types of temporary solutions like

registry. They are often a prime target of recruitment efforts by a hospital; and many eventually settle permanently at a hospital to which they have "traveled". Finally, travel nurses are excellent public relations vehicles. They spread the word about their assignment experiences (good and bad) quickly and effectively across the country.

The most significant concern when considering the use of travel nurses as a strategic staffing alternative is the concern over quality. Unfortunately, only one report in the literature addresses this concern. While the overwhelming opinion is that travel nurses provide lower quality of care than their permanent counterparts, they are as or more qualified than permanent nurses and the quality of patient outcomes is better in hospitals that use supplemental (of which travel nurses are a part) nurses (Aiken et al., 2007). More research is needed to further understand the relationship between the use of travel nurses and the quality of patient outcomes.

Temporary nurses.

The literature is extremely limited with respect to studies of temporary nurses and there are no research articles specifically examining travel nurses. The following table depicts the existing literature related to temporary nurses (Figure 1).

Figure 1

Existing Literature: Temporary Nurses

Year	First Author	Purpose	Country
2007	Aiken	Quality outcomes by supplemental nurses	United States
2007	Yeh	Description of temporary nurses	Taiwan
2007	Goodman-Bacon	Demographic descriptions of temporary nurses	United States
2006	Jalonen	Temporary nurses and organizations	Finland
2003	Viertanen	Temporary staff (some nurses) and organizations	Finland
1998	Van Dyne	Temporary staff (some nurses) and organizations	Singapore
1979-1986	Prescott	Described various aspects of supplemental nurses in 4 articles	United States

The available research can be grouped into a few topical areas. First, some studies examined nurse attributes in the context of their organizational commitment. Level of job control and participation in decision making were the best predictors of organizational commitment in temporary nurses (Jalonen, Virtanen, Vahtera, Elovainio, & Kivimaki, 2006). Temporary nurses exhibited less organizational commitment than their permanent counterparts (Van Dyne & Ang, 1998). Van Dyne also tested the "social exchange theory" in her 1998 study. The more that contingent workers felt positively towards their employer, the more willing they were to extend their efforts on the employer's behalf (Van Dyne & Ang, 1998).

Second, some reports have simply described temporary nurses. Temporary nurses were younger, less likely to be married and have children, were more often male and were as likely or more likely to have a baccalaureate degree in nursing than permanently employed nurses (Goodman-Bacon & Ono, 2007; Yeh et al., 2007). Supplemental nurses

were also described as being as qualified or more so than permanent nurses (Aiken et al.,

2007).

Third, a series of articles published in the early 1980's discussed various issues

surrounding the use of supplemental staff. The first of these pointed out the general belief

that quality of supplemental nurses was substandard, but was based on a few very

informal interviews (Prescott & Langford, 1979). Several articles from the same research

sample examined costs of supplemental nurses, reasons hospitals used supplemental

nurses and compared attributes of hospitals that used, versus those that didn't use

supplemental nurses (Prescott, 1982; Prescott, Janken, & Jacox, 1982; Prescott, Janken,

& Langford, 1983). None of these works described rigorous research methods and

appeared to be as much opinion as bona fide research.

A final article by the same author described somewhat stronger research methods

and statistical testing comparing temporary and permanent nurses. Twelve predictor

variables were described. Supplemental nurses had more control over basic working

conditions, more flexible work schedules, higher hourly salaries, held multiple nursing

positions, and had higher shift differentials. On the other hand, permanent nurses had

more opportunities for promotion and responsibility, more independent nursing practice,

longer employment tenure, more job orientation, more continuity with patients and more

time spent in unit management activities (Prescott, 1986).

Dependent Variables

Outcome variables in this study were job satisfaction and burnout. The two

concepts are paired often in the literature because of their interrelatedness. The review of

literature related to these 2 topics takes a very focused approach due to the extensive work that has been done.

Burnout.

A discussion about job satisfaction would not be complete without visiting the topic of burnout; a sometimes antecedent to or result of job dissatisfaction. Burnout is "a state of physical, emotional and mental exhaustion that results from long-term involvement in work situations that are emotionally demanding" (Schaufeli & Greenglass, 2001). It has been studied extensively in healthcare and in general industry. Because of its close relationship to job dissatisfaction and intent to leave, burnout is critically important in any review of the work environment. Several instruments were developed to measure burnout. A brief comparative critique of three instruments follows.

Maslach Burnout Inventory.

The Maslach Burnout Inventory (MBI) was developed in the early 1980's and is the most commonly used instrument to measure burnout (Maslach & Jackson, 1981). The MBI has been used extensively in the nursing research related to burnout. The MBI is based on a three-factor model of burnout and uses the following measurement scales: emotional exhaustion, depersonalization and personal accomplishment (Maslach & Jackson, 1981). The original MBI was developed for the human services industry, but since then two other versions have been produced: one for educational services and another for industries in which human services is not a large component. The evolution of the tool into nearly all employment sectors signals the importance of the study of burnout related to work environment outcomes. Even though the MBI enjoys widespread use, not all are in agreement that the tool effectively measures burnout. Some problems with the

MBI that have been argued in the literature include: (a) the personal accomplishment scale is less consistently related to other organizational outcomes, (b) a single directional wording of scale items may be influencing responses, (c) the exhaustion scale excludes aspects of exhaustion that may be important, specifically physical and cognitive exhaustion (Halbesleben & Demerouti, 2005) and (d) mixing of an individual state (emotional exhaustion), a coping strategy (depersonalization) and an effect (personal accomplishment) confuses the interpretation of the results (Kristensen et al., 2005).

Oldenburg Burnout Inventory.

The Oldenburg Burnout Inventory (OLBI) was introduced in 2002. It was intended to address some of the issues with the MBI. It is a two-scale instrument consisting of exhaustion and disengagement measures with balanced positively and negatively phrased statements (Halbesleben & Demerouti, 2005). It captures responses related to physical and cognitive exhaustion and can be used with any occupational group. The OLBI has not been used extensively in English-speaking countries, though there is some evidence that supports validity and reliability of the English version.

Copenhagen Burnout Inventory.

The Copenhagen Burnout Inventory (CBI) was introduced in 2005 (Kristensen et al., 2005). Initial testing was accomplished in the healthcare and social service fields, and nurses were among those tested. It focuses only on the element of exhaustion, thus eliminating confusion associated with the concepts of depersonalization and personal accomplishment. It segments exhaustion into three sub-scales: (a) personal burnout, (b) work-related burnout and (c) client (or patient)-related burnout. The CBI does not enjoy

wide spread use at this time, though it is being used in many countries. Because it is relatively new, further evidence of consistency in its psychometric properties is needed.

The CBI was selected for use in this study for several reasons. First, the single focus on exhaustion with three sub-scales is appropriate in studying nurses. Second, unlike the popular MBI, the CBI is in the public domain. Finally, because the evidence supporting the psychometric properties of the scale is strong there is opportunity to add to the literature in support of this newer instrument.

Job Satisfaction.

Nurse job satisfaction has been studied comprehensively over the years. The very first research report published on the topic of job satisfaction of nurses was in 1940 (Nahm). Since that time, as this country has cycled through several nursing shortages, job satisfaction of nurses was a frequent target for nurse researchers. In order to achieve an effective and productive work environment it was important to understand how workers felt about their jobs, not just in nursing, but in business as well. Job satisfaction, job happiness and engagement have all been studied in the business literature. In nursing, research related to job satisfaction was often associated with times in which a shortage of nurses was thought to be growing or at a peak. In reality, nurse job satisfaction should always be of concern. The related research postulated that there were three general predictors of nursing satisfaction: individual nurse attributes, unit-related features and organizational characteristics (Admi, Tzischinsky, Epstein, Herer, & Lavie, 2008; Aiken et al., 2002; Sarmiento, Laschinger, & Iwasiw, 2004; Schmalenberg & Kramer, 2007; Shaver & Lacey, 2003; Wade et al., 2008; Zurmehly, 2008). Specific attributes within these predictors were used as independent variables in this study.

Independent Variables

As mentioned earlier, there are several categories of general predictors of nurse

job satisfaction. These categories are: individual nurse attributes, unit related features and

organizational characteristics. Independent variables in this study were tested within each

of these areas (see Figure 2).

Figure 2

Independent Variables

Nurse individual attributes		Unit/hospital attributes		Organizational attributes
Demographics of nurses	Qualifications of nurses	Unit related features	Hospital charact.	Quality of the environment
Age	Initial education	Staffing adequacy	Type	Magnet status
Gender	Highest education	Unit specialty	Location	Nurse-assessed quality care
Race/ethnicity	Yrs of experience	Number of pts	Size	
Marital status	Yrs as travel nurse			
Children	Yrs in specialty			

Individual attributes - demographics.

Various studies have examined a multitude of individual attributes in order to

determine the relationships between these attributes and job satisfaction. Among the

attributes studied were: age, tenure, family income, marital status, race, job position,

educational level, gender, and nursing specialty (Ellenbecker, 2004). Of these, age, tenure

and positions outside of acute hospital staff nursing were most commonly associated with

job satisfaction (Ingersoll, Olsan, Drew-Cates, DeVinney, & Davies, 2002; Norman et al.,

2005; Wade et al., 2008). As nurses age, they exhibit higher levels of job satisfaction.

Consider that older nurses, have more tenure and, as they age, are more likely to hold a

position outside of direct staffing in acute care; so it is not unexpected that these variables

would exhibit similar relationships. Other researchers have specifically utilized age as an

independent variable and found no relationship to job satisfaction (Larrabee et al., 2003; Ma, Samuels, & Alexander, 2003).

The type of nursing specialty may play a role in job satisfaction of nurses working in acute care staff positions. The relationship between specialty and job satisfaction was explored in a few studies. Findings were somewhat scattered, e.g. nurses working in psychiatric units and long term care were less satisfied than other nurses working in direct patient care (Wade et al., 2008); and neonatal intensive care and pediatric nurses were more satisfied than their counterparts working in adult intensive care units and adult medical surgical units (Roberts, Jones, & Lynn, 2004; Schmalenberg & Kramer, 2007).

Neonatal intensive care nurses exhibited the highest levels of job satisfaction, and showed the highest scores in rating the following components of their work environment: nurse-physician relationship, control over nursing practice, perceived adequacy of staffing and patient-centered values (Schmalenberg & Kramer, 2007). Generally, researchers found higher satisfaction levels in nurses working outside of acute care areas (Ingersoll, Olsan, Drew-Cates, DeVinney, & Davies, 2002; Ma et al., 2003; Shaver & Lacey, 2003). No studies have reported findings describing the relationships between gender, race, socioeconomic status, family income or marital status. Given the lack of evidence, it is likely that no significant relationships exist.

Individual attributes – qualifications.

The relationship of nurse qualifications to job satisfaction has also been studied. Several reports showed a positive and significant relationship between education and job satisfaction (Ingersoll et al., 2002; Wade et al., 2008; Zurmehly, 2008).

A general theme arises in reviewing these reports as a whole. Tenure and educational level may be associated with career progression, which also likely holds a positive correlation with age. Acute care hospitals are the largest employers of nurses employing nearly 60% of all nurses (Bureau of Labor Statistics, 2006). The natural progression for most nursing careers has a beginning in acute care staff nursing. As a nurse pursues a career over time, that career is likely to shift out of direct patient care in hospitals and into a variety of other options: management or administration; home health, public health or community nursing; informatics or other technology related opportunities; school nursing; academia; or a myriad of advanced practice job positions. All of these opportunities exist outside of direct staff nursing in hospitals; where it seems nurses are the most dissatisfied (Ingersoll et al., 2002; Ma et al., 2003; Shaver & Lacey, 2003). A movement into any of these opportunities is going to be more likely for nurses as they get older, have more tenure or gain more education – all of which are significantly related to job satisfaction in the literature (Ingersoll et al., 2002; Norman et al., 2005; Wade et al., 2008).

While it is commonly acknowledged that certain individual characteristics may be related to job satisfaction, it is widely believed that the predictors of satisfaction in nurses are related more to organizational and unit attributes of hospitals (Adams & Bond, 2000; Blegen, Vaughn, & Vojir, 2008; Laschinger, Finegan, & Shamian, 2001). These workplace attributes have occupied the preponderance of research in the past 15 years.

Unit/hospital attributes.

Attributes within hospitals that exert influence on satisfaction are different based on the organization as a whole versus the unit. At the unit level factors that influenced

nurse job satisfaction and mentioned most in the literature were: autonomy (Ellenbecker, 2004; Laschinger, Shamian, & Thomson, 2001; Zurmehly, 2008), co-worker relationships (peers and physicians) (Adams & Bond, 2000; Archibald, 2006; Laschinger et al., 2001; Manojlovich, 2005), adequate staffing resources (Adams & Bond, 2000; Cho et al., 2009; Manojlovich & Laschinger, 2007; Shaver & Lacey, 2003; Wade et al., 2008), and nurse manager behavior (McNeese-Smith, 1997; Wade et al., 2008).

Autonomy is the ability to exercise independent nursing judgment for patient care within one's practice (Sengin, 2003). In most studies examining autonomy, other unit or organizational attributes were also involved in the research. Critical thinking capabilities were tied closely to the ability to effectively practice autonomously. Both critical thinking and autonomy significantly and positively influenced job satisfaction in nurses (Zurmehly, 2008). Job satisfaction was higher in nurses who perceived higher levels of autonomy, control over their environment and collaboration (Laschinger et al., 2001). In the home health arena nurse job satisfaction was related to autonomy and relationships with co-workers (Ellenbecker, 2004).

As expected, manager behaviors contribute to job satisfaction. This contribution could be positive in the form of providing recognition and thanks, meeting nurses' personal needs when able, helping or guiding the nurse, using leadership skills effectively, meeting unit needs, and supporting the team. Manager behaviors could contribute in a negative manner by not providing recognition or support, not following through with problems, and either not helping or worse, criticizing when patient care loads are heavy (McNeese-Smith, 1997). While nurse manager behaviors alone may influence nurse satisfaction, these same managers typically had responsibility for staffing

levels within the unit. Staffing and resource allocation were the best predictors of job satisfaction (Wade et al., 2008). As patient load increased, nurse satisfaction decreased (Shaver & Lacey, 2003). In addition, nurses with a perception of adequate staffing were less likely to be dissatisfied, burned out or indicate an intent to leave their job (Cho et al., 2009). While this last finding was directionally relevant, it was not significant.

Unit-based communication factors had an influence on nurse job satisfaction. In one study, the strongest predictors of satisfaction related to intrapersonal conflict, intra-group conflict and technology implementations. Nurses with higher levels of conflict and those working in units with technology implementations exhibited lower levels of satisfaction (Ingersoll et al., 2002). Technology implementations served as a proxy for high variability, uncertainty, change and instability in the unit. Finally, nurse-physician communications had an effect on nurse job satisfaction. The effectiveness of nurse-physician communications were strong predictors for satisfaction and played a mediating role in the impact of the work environment in general on nurse job satisfaction (Manojlovich, 2005).

Organization attributes.

At the organizational level, quality of the workplace was a critical predictor of job satisfaction. A direct measure for workplace quality does not exist. In this study, nurse-assessed quality of care and the Magnet designation status of a hospital employer were used as proxy measures for workplace quality.

Nurse-assessed quality of care.

Some studies used nurse-assessed quality of care as a method to more easily measure quality of patient care. By means of a survey question a nurse is asked to rate

the quality of care on the unit during a specified time period. This measure was most often used as an outcome variable. Studies using this type of "opinion variable" reported similar results. Specific attributes identified within a positive work environment were associated with less burnout. These lower levels of burnout, in turn, influenced the nurses perceived quality of care in a positive manner (Laschinger et al., 2001). Nurse-assessed quality of care and job satisfaction varied positively and in similar direction when evaluated against characteristics of a positive work environment (Schmalenberg & Kramer, 2007). Higher percentages of nurses working in hospitals with poor care environments reported higher levels of both burnout and job dissatisfaction. Those nurses that reported a poor quality of care in hospitals with poor care environments numbered double that of nurses reporting poor quality in hospitals with better care environments (Aiken, Clarke, Sloane, Lake, & Cheney, 2008). In attempting to determine if these nurse assessments were accurate, a study from Korean nurse researchers compared a quantitative staffing metric and a nurse perception of staffing adequacy score against a nurse-assessed quality of care rating. They found that the actual staffing level and perception of adequate staffing were both significantly related to nurse-rated quality of care (Cho et al., 2009).

Empowerment is the single common organizational attribute that regularly appears in the literature in relation to its positive influence on satisfaction. Organizations with a firm culture that enables and encourages empowerment have higher retention of nurses (Larrabee et al., 2003; Laschinger et al., 2001; Manojlovich & Laschinger, 2007; Sarmiento, Laschinger, & Iwasiw, 2004). In a study examining job burnout and empowerment experiences in nurse educators, findings supported that job satisfaction

was higher with higher levels of empowerment and lower burnout, however

empowerment was the stronger predictor (Sarmiento et al., 2004). Others have found that

attributes such as transformational leadership and collaborative practice influence job

satisfaction through the mediating influence of empowerment (Larrabee et al., 2003).

This finding was further supported by another study that examined the relationship

between organizational Magnet attributes and job satisfaction. Strong nursing leadership,

participation in hospital affairs, adequate staffing and resources, collegial nurse-physician

relations and a nursing model of care all significantly influenced job satisfaction. The

addition of empowerment provided further positive and significant influence

(Manojlovich & Laschinger, 2007).

Finally, organizational values and culture influenced the attributes and

philosophies adopted by institutions. Those nurses that recognized and assimilated

organizational values and goals were more likely to remain employed by the organization

and exhibited stronger dedicated efforts toward helping the organization achieve its goals

(Chang & Chang, 2007).

Magnet designation.

Since its beginnings in 1983, the Magnet Recognition Program® has evolved to

symbolize the impact that dedication to nursing excellence can make to bolster a positive

workplace. The program recognizes healthcare organizations that practice nursing

excellence through provision of quality patient care and innovations in nursing practice.

Critical qualitative factors that must be present are defined in the 14 forces of magnetism.

These forces have recently been categorized into three model components.

Transformational leadership incorporates the forces of quality of the nursing leadership

and management style. Structural empowerment includes organizational structure, personnel policies and programs, community and the healthcare organization, image of nursing, and professional development. Finally, exemplary professional practice embraces the forces of professional models of care, consultation and resources, autonomy, nurses as teachers, interdisciplinary relationships, quality of care, and quality improvement (American Nurses Credentialing Center, 2008). Currently there are 340 Magnet designated facilities in 44 states (American Nurses Credentialing Center, 2009).

Magnet designation has become a proxy for the quality of the work environment with respect to nursing. Research strongly links work environment to nurse satisfaction, yet little evidence exists that specifically supports Magnet designation as a significant predictor of satisfaction. There are reports showing relationships between various Magnet attributes and nurse satisfaction. Many of these reports also examined staffing adequacy and quality of care. As an example, a nursing model of care and strong nursing leadership contributed most strongly to empowerment; and empowerment was significantly and positively related to the Magnet professional practice characteristics of: nursing participation in hospital affairs; nursing foundations for quality of care; nurse manager ability, leadership, and support for nurses; staffing and resource adequacy; and the degree of collegial nurse-physician relationships (Armstrong & Laschinger, 2006). More recently, evidence supporting the relationship of the Magnet attributes of quality of care, nurse manager ability, leadership and support of nurses; resource adequacy and collegial nurse-physician relations on job enjoyment was reported (Wade et al., 2008). Adding empowerment as a further potentially explanatory attribute provided further positive and

significant influences of these Magnet attributes on job satisfaction (Manojlovich & Laschinger, 2007).

The ANCC reports various metrics for its Magnet designated population of hospitals. Some of these metrics are turnover rates, workforce data such as educational level, and years of experience. Various research studies have examined Magnet attributes and relationships to outcomes such as quality of care and nurse job satisfaction. Yet there has not been any research reporting quality outcomes for patients and nurses in Magnet hospitals as compared with those hospitals that have not achieved Magnet designation. The Magnet forces are logical upon examination and reflection, yet without comparative data the case for pursuit of Magnet designation remains obscure (especially to non-nurses).

Patient Outcomes

Hospital work environments that contribute to nurse job dissatisfaction have been linked in the literature to poor patient outcomes (Aiken et al., 2002). Various aspects of the work environment relative to patient outcomes were studied. Researchers examined mortality, failure to rescue, certain quality indicators, staffing levels, and use of supplemental nurses to help better understand various predictors on patient outcomes. Nurse staffing is inversely related to specific quality indicators. For example, post-operative venous thrombosis, post-operative pulmonary compromise, post-operative pneumonia, and post-operative urinary tract infection were all lower in hospitals with higher levels of registered nurse staffing; though the pneumonia finding was the only significant relationship (Kovner, Jones, Chunliu, Gergen, & Basu, 2002).

Staffing with more nurses is a reasonable mechanism to improve outcomes, yet because there is a large labor expense associated with improved nurse staffing, the decision to increase staffing levels is undertaken seriously and with a high degree of diligence to ensure a quantifiable return on investment. There may be a point, however, at which increasing the number of nurses does not equate to a marginal gain in quality outcomes. The relationship between registered nurse staffing and the mortality ratio is nonlinear; increases in nurse staffing level decreased mortality up to a certain point and then the impact diminished (Mark, Salyer, & Wan, 2003). Many purport that the use of supplemental nurses is associated with poorer patient outcomes. Yet, in a study examining patient outcomes and the relationship to the utilization of supplemental nurses, researchers found that poor outcomes were associated with deficits in the work environment rather than care given by supplemental nurses (Aiken et al., 2007).

Conceptualization

There are several conceptual frameworks and models that have been developed to explain the retention of nurses. Most of these models find a basis in the Structure – Process – Outcome model of quality care first published by Donabedian in 1982. Four of these model variants are presented below with a brief critique.

The Quality Health Outcomes Model.

The Quality Health Outcomes Model (QHOM) finds its basis in the original traditional linear structure-process-outcome model described by Donabedian. The QHOM (Mitchell, Ferketich, & Jennings, 1998) poses a dynamic view of quality outcomes. Rather than a single, one-directional interface between interventions and outcomes; QHOM incorporates reciprocal influence amongst the actors. The model

suggests that interventions do not directly influence outcomes, but instead are mediated by the system and the client roles. In addition, the flow is not linear, but bi-directional.

The QHOM allows for a more complex and interactive environment than does the traditional linear model. The actors in this model include the "system" which may be comprised of an individual, a group or an organization. The system interacts directly with interventions, the client (which can be an individual, a family or a group) and the outcomes. Likewise each of these actors interacts with all of the others creating bi-directional forces of influence amongst all of them.

The Nursing Role Effectiveness Model.

The Nursing Role Effectiveness Model (NREM) was developed in order to more accurately explain the contribution of nursing within the healthcare system (Doran, Sidani, Keatings, & Doidge, 2002). In this model, structure is defined as the nurse, patient and nursing unit variables. These variables have an influence on process that, in turn, influences outcome. The model is linear in nature with action progressing in a uni-directional manner. Examples of nurse variables are education and hospital experience. Unit variables are level of job autonomy and existence and extent of role tension. Patient variables can be diagnosis, age, gender, length of stay and education. The process portion of the model incorporates the role function of nurses; those for which only nurses are accountable and those that nurses share with other members of the health care team. The model outcome is related to patients: health status, perceived benefit from nursing care and costs associated with nursing care. This model has both expanded and narrowed the scope of the previous model examined. It is expanded by means of identifying multiple

components in each of the areas, but has narrowed in that its focus is specifically on the care that nurses provide.

The Organizational Influence on Outcomes (this author's title).

The Organizational Influence on Outcomes (OIO) framework further defines structure as those organizational forms that may be hospital-wide such as achievement of Magnet designation and those unit structures that may lead to unique unit qualities, e.g. hospice units (Aiken et al., 1997). It gives a more detailed explanation to the basic structure-process-outcome model. Process attributes are associated with nurses and the specific nursing environment. Autonomy of practice, control over the environment (such as adequacy of nurse staffing), and quality of nurse-physician relations are examples of operant mechanisms that act in the manner of how things get done. Finally, outcomes are defined in the terms of nurse, patient, and organization. Nurses may experience burnout and job dissatisfaction or the opposite of both. The nurse outcomes have a mediating effect on both patient and organizational outcomes. The resulting outcomes are patient satisfaction with care and the occurrence of any complications, and the organization in terms of costs.

The Revised Nursing Worklife Model.

The Revised Nursing Worklife Model (RNWM) was developed to help explain the influences of organizations and nursing units on nurses' lives in the workplace and the relationship of these to burnout experienced by nurses (Manojlovich & Laschinger, 2007). Nurse dissatisfaction stems from the following organizational characteristics: inadequate staffing, too few resources, poor nurse-physician relations, and a non-nursing model of care. This model has a strong nursing focus with empowerment embodying the

attributes most often associated with Magnet designation. The original model used the MBI constructs of emotional exhaustion, depersonalization, and personal accomplishment. In the revised model, these constructs have been replaced with job satisfaction alone. The model is multi-directional, with constructs influencing some other constructs, but not in a reverse direction. For example empowerment influences both nursing job satisfaction and strong leadership. Strong leadership, in turn, exerts influence on adequate staffing resources, collegial nurse-physician relations, and participation in hospital affairs. Adequate staffing resources impacts nursing job satisfaction; while collegial nurse-physician relations influences both participation in hospital affairs and existence of a nursing model of care. Finally, the nursing model of care rounds out the model by its influence on adequate staffing and resources.

All of the models described have a basis in the structure-process-outcome theory though each have added components of varying influence, and according to the interests and beliefs of the specific researchers.

The Theory of Work Adjustment.

The Theory of Work Adjustment (TWA) proposes that work environments and workers interact with each other and that successful work relations are the result of continuous adjustments made by both parties in order to create a balanced state of communication. Job satisfaction is the result of the degree to which an individual's job requirements are met by the work environment (Bretz & Judge, 1994). The fit between the person and the environment becomes evident in the tenure of the worker. Individuals will leave sooner if the fit with the environment is not good. Not only is tenure a factor,

but indeed, "person-organization fit" results in both higher levels of satisfaction, but also in more career success.

TWA has several implications related to this study. First, organizations might consider carefully scrutinizing for "fit" during the interview and selection process, knowing that good "fits" will stay longer and contribute more greatly to the organization. Next, as organizations define the structural elements that contribute to their success, they should remain flexible in order to attract "fits" in a wide variety of employees. For example, many hospital organizations have as one of their hallmarks a commitment to professional development and career advancement. It is possible that many nurses are not interested so much in professional development. Perhaps they joined nursing to take care of patients and may choose to remain in direct patient care for the entirety of their career. Those that feel compelled to pursue professional achievements beyond their own personal requirements may not experience a good "fit" and may instead leave that organization. If, on the other hand, an organization remains flexible and instead of encouraging a single path has alternatives for their nurses, the environment may be able to allow for a larger variety of nurses to experience a "fit".

Finally, travel nurses are unique in that they move around to many different hospitals throughout their travel career. They have the opportunity to learn about an organization's philosophies and structures to better understand what makes a better employment "fit" for them and what doesn't. Through this continued movement they may be more likely to find a good "fit" than others who have not experienced this type of employment flexibility. Perhaps a future study can explore whether travel nurses enjoy more job satisfaction than permanently employed nurses.

Chapter 3

Methodology

The purpose of this study was to examine various individual and work environment characteristics and their influence as predictors of travel nurse job satisfaction and burnout. In addition, it served to describe travel nurses; a population of nurses that has not been previously studied. Segments of a conceptual framework describing relationships between unit attributes and hospital organizations, and their impact on nurse job satisfaction and quality of patient care were examined.

The aims and research questions of this study lent themselves to a mixed methods design. The explanatory sequential model for mixed methods procedures was used because this method allowed for amplification and expansion of specific quantitative results. The primary focus of the research was on the quantitative results with the qualitative analysis available to further expand and augment specific segments of the study and respond to study aim #3. The qualitative portion was an important addition, because this study is potentially the first time that this particular segment of the nurse population has been studied. Including the rich content that can be retrieved from qualitative research added greatly to the findings.

This chapter offers a detailed description of the study design and procedures, and data analysis organized by study aim. A discussion of limitations and the protection of human subjects completes this chapter on methods.

Quantitative Design and Analysis

Design

The quantitative portion of the study used a descriptive correlational methodology with secondary data analysis of a cross-sectional sample responding to an on-line self-administered survey. The survey was collected in March and April of 2009 and resulted in a 28.7% response rate. Because the area of interest was to describe relationships and quantify the predictive capabilities of multiple independent variables on a single dependent variable (at a time), multiple regression analysis was performed.

The dependent variables under study were burnout and job satisfaction. Analyses were run separately to consider the effects of the independent variables on each of these outcome variables. Work-related burnout was explored using the Copenhagen Burnout Inventory (CBI). Job satisfaction was determined by the response to the single question, "overall, I am satisfied with my current job" rated on a 5-point Likert-type scale; from strongly disagree to strongly agree.

The independent variables of interest were the nurse attributes: nurse's age, gender, race, marital status, education (first in nursing), highest level of education, years since graduated from basic nursing education, years as a travel nurse, specialty of unit where working, years in specialty; the unit/hospital attributes: location (state), type of facility (for-profit, academic, etc), staffing adequacy and number of patients; and the quality of work environment proxies: nurse-assessed quality of care and magnet status.

Procedures

Sample.

The sample consisted of registered nurses found in the database of nurses working on assignment (when the survey was delivered) for a large, national healthcare staffing company. It was a purposive, non-randomized sample. Surveys were sent to 4,291 nurses. Inclusion criteria were all registered nurses that were working on a travel assignment in a hospital setting on March 09, 2009; and had been on assignment for at least four weeks. Having at least four weeks of experience as a travel nurse was important to give the respondent enough of a framework from which to provide meaningful information.

The survey design was pilot tested using a group of five travel nurses. Several suggested changes related to purpose, clarity, content, technical issues, layout and other minor concerns. Appropriate changes were made prior to administering the survey to the sample population.

Respondents were offered a chance to win a $150 gift card in a drawing in which two winners were selected, as recognition of their time spent completing the survey. Reminder e-mails were sent to non-respondents at two-week intervals over a period of two months during which time 1,231 surveys were returned. The primary advantages of this sampling method were convenience, cost-effectiveness, and access to the population. The sample was a non-randomized, purposive sample of travel nurses working for a single healthcare staffing company, therefore, the study's ability to be generalized to other populations was limited.

Power.

To have sufficient power in the analysis, a final sample size of 161 was needed,

assuming a moderate effect size ($R^2 = 0.13$), $\alpha = 0.05$ and a power of 0.80. The sample

size needed was calculated using the formula below, where L equals the tabled value of

power and selected α level, v equals the selected effect size and k is the number of

independent variables in the model:

$$N = (L/v) + k + 1$$

$$N = (18.81/0.13)+15+1$$

$$N = 160.69$$

Since 1,231 surveys were returned, adequate power was achieved.

Data collection.

The survey contained a total of 53 questions and five different scales (see

Appendix A). It was formatted into a web-based design to allow for on-line completion,

submission, and data collection. This on-line survey was used to enable the researchers

access to a larger sample size without increasing expense, as well as for ease of response

for the participants. The primary scale that was used in the data analysis was the

Copenhagen Burnout Inventory (CBI). This instrument (see Appendix B) was selected

because it was considered superior to other burnout scales for the purposes of this study

because it measures three sub-dimensions of burnout: personal burnout, work-related

burnout and patient-related burnout. In the original testing, the instrument demonstrated

high internal reliability in all three sub-dimensions ($\alpha=0.87$ for personal burnout, $\alpha=0.87$

for work-related burnout and $\alpha=0.85$ for patient-related burnout) (Kristensen et al.,

2005). Reliability was tested in the study sample with the Cronbach's alpha statistical test prior to data analysis. The scale exhibited high internal reliability with this sample as well ($\alpha = 0.91$ for personal burnout, $\alpha = 0.87$ for work-related burnout, and $\alpha = 0.89$ for patient-related burnout).

Data Analysis

The quantitative data was analyzed using the SPSS 17.0 program. Descriptive statistics were reported on all dependent and independent variables. These descriptives were compared to similar statistics reported on the general nurse population and in other studies. The National Sample Survey of Registered Nurses is a survey conducted every four years by the U.S. Department of Health and Human Services and it was the primary dataset against which comparisons were made (2006).

Pre-analysis data screening.

Prior to beginning the analysis of the data, it was important to run several analyses to become familiar with the data and check for inaccuracies. This pre-analysis screening served to test for the required assumptions as well as allowed for identification and correction of common problems that can influence the accuracy of the analysis.

Missing data and outliers.

Data were examined to determine if missing data occurred randomly or in patterns. There were several options that were considered to manage missing data. Various options included: dropping cases with missing data, dropping the entire variable that includes the missing data, and estimation of and replacing missing values (using prior knowledge as a best guess, using the value of the mean as the best estimate or using a regression approach). Following examination of the data, it was determined that for

general survey questions with missing data, those cases would be dropped from the analysis. This decision was made because there really was not a good way to estimate missing data of this type, and the volume of respondents was large enough even when dropping the cases to achieve sufficient power.

For the CBI scales the best option for missing cases was determining the mean of the case sub-dimension and applying the mean to any missing values for that case. Estimating in this manner was the best option based on the inter-relatedness of the sub-dimension items, making replacement with the mean a likely response. The authors of the tool recommended eliminating any cases that had less than 50% response in any of the three sub-dimensions, but this was not found to be a problem (Kristensen et al., 2005).

Outliers (extreme values) can pose serious problems in regression analysis causing a result to be significant when it really is not and vice versa. The data was evaluated for outliers by running the analysis Mahalanobis distance. While this particular procedure was useful in identifying the outliers, further examination of each individual case was required. This examination was used to determine whether the outliers were legitimate cases or were a result of data entry or some other error. Decisions regarding management of the outliers were made based on detailed examination of the cases.

In the responses to two of the survey questions, outliers were discovered. The question "what is the average number of hours you work each week" had eight outliers. Upon examination seven of these were thought to be hours associated with a timeframe other than a single week. The values for these outliers were estimated by dividing the response by what logically was the correct timeframe, e.g. several responses were 72. Logically, this was probably a two-week timeframe, so 72 was divided by two and the

result of 36 replaced the value of 72. The question "what is the average hourly salary you earn in dollars" was the second question that exhibited outliers. Again, where appropriate, values were estimated, e.g. $70,000 was thought to be an annual salary rather than hourly, so it was divided by 1,872 (the number of hours worked in one year on 12 hour shifts) and the new value of 37.40 was entered instead. A total of 18 outliers were found and corrected for this question.

Linearity, normality and homoscedasticity.

The accuracy and applicability of multiple regression relies on several assumptions being met. The assumptions tested were checking for: a linear relationship between the dependent and independent variables, a normal distribution of the variable values, and that the variance of the residuals across the values of the independent variable was constant (known as homoscedasticity) (Mertler & Vannatta, 2005).

Linearity was analyzed by reviewing scatterplots. In a linear distribution the values should group together in a somewhat straight line (either upward and to the right in a positive relationship or downward and to the right in a negative relationship). Descriptive statistics were used to assess normality of the distribution. Specifically, tests for kurtosis and skew were analyzed. The skew values were between -1.0 and +1.0, and the kurtosis value was near zero. Together these tests described a roughly normal distribution. Homoscedasticity was evaluated through examination of a residuals plot. Values were scattered evenly about the reference line such that the constant variance assumption was met (Mertler & Vannatta, 2005).

Moderate violations of any of the above assumptions were ignored, as multiple regression is not sensitive to moderate violations of the assumptions. Since no violations

were found to be severe, other, more drastic data manipulations such as data transformation or elimination of the variable in question were not necessary.

Finally, bivariate correlation analyses was run on all of the independent and dependent variables. Examination of the r values revealed relationships and relative strength of relationships amongst the variables. These relationships assisted in determining which independent variables were used in the final regression analyses. The decision for inclusion in regression analytics was based on the stronger of the associations amongst the independent variables and dependent variables.

Regression Analysis

A multiple regression analysis was utilized to examine the influence of the independent variables on each of the dependent variables by running separate analyses (one for each dependent variable). Testing the predictability of the independent variables on the outcome variables was the primary interest in this study, therefore, multiple linear regression analysis was the most appropriate analytic method (Mertler & Vannatta, 2005).

With the pre-screening analytics completed and having successfully managed and documented the results of these analytics, the regression analyses were run (one for each of the two quantitative specific aims). A standard multiple regression analysis was used in order to assess the influence of the selected independent variables on the dependent variable. The independent variables were added into the model all at once.

Aim 1: Determine the relationship between Magnet hospital designation and level of job satisfaction in travel nurses.

For analysis of this particular aim, the primary dependent variable was job satisfaction. Independent variables were selected based on their level of correlations with the dependent variable.

Multicollinearity

Multicollinearity occurs when there is a strong correlation between two or more of the independent variables. It is problematic in multiple regression analyses because as the correlation between variables increases it becomes more likely that a variable that is actually a good predictor of the outcome variable will be found to be non-significant (Field, 2005). Testing for multicollinearity among the independent variables was done as part of the regression analysis. The tolerance statistic was not greater than 1.0 for any of the independent variables.

Model Validation

The model summary is part of the output in the standard multiple regression analysis. This table reported the amount of variability accounted for by the independent variables with the R^2 statistic (Mertler & Vannatta, 2005). In addition, the ANOVA table was reviewed for the model fit. A significant F-test in this analysis is a finding that the relationship between variables is linear and that the model is a good fit for the data. The F-test was significant (F $\{30, 2774\}$ = 6.55, p = 0.00).

Significance and Predictability of the Variables

The regression analysis provided information about the amount of influence each of the independent variables had on the outcome variable and was the final step in the

data analysis. Selected independent variables were added into the analysis all at once. A single model was run examining job satisfaction. The coefficients table was examined for variables with a significant result (p value <0.05). Both the B weight and the standardized β (beta) statistic were then reviewed. Each one-unit change in the independent variable influences the change in the dependent variable to the degree indicated by β and can be either positive or negative. In this manner, the results of the regression analysis were reporting the individual influences of the various independent variables (with significant results) on the dependent variable.

Aim 2: What variables exert the most influence in predicting burnout and job dissatisfaction in travel nurses?

For analysis of this particular Aim, the primary dependent variable was work-related burnout, however, job satisfaction and intent to leave were also examined. Independent variables were selected based on their level of correlations with the dependent variable.

Multicollinearity

Testing for multicollinearity among the independent variables was done as with the previous aim. The tolerance statistic in this analysis was less than 1.0.

Model Validation

Model validation was handled in the same manner as described with aim #1, but using the burnout dependent variables. The ANOVA table revealed a significant F-test (F $\{29, 939\}$ = 4.02, p = 0.00) indicating that the model was a good fit for the data.

Qualitative Design.

Aim 3: Describe the characteristics of travel nurses and the reasons why a nurse might choose to work as a travel nurse.

Design and Methods

The qualitative portion of the study described travel nurses through a content analysis of telephone interviews. An ethnographic, grounded theory approach was used in the collection and analysis of the data. It was a retrospective analysis of pre-collected data.

Data collection.

A single question near the end of the on-line survey asked respondents if they would be interested in participating in an individual telephone interview to provide additional insight into travel nursing. Sixty-eight respondents indicated an interest to participate in the interview and provided an e-mail address for contact purposes. An e-mail invitation was sent in June 2009 to all 68 respondents to solicit participants for the telephone interviews. The invitation explained the process for participation and requested a reply to schedule an interview appointment. Informed consent language (Appendix C) was also included in this e-mail invitation; and verbal consent was obtained by the researcher prior to beginning the interview. A total of 32 nurses initially agreed to participate in the telephone interviews. A separate member of the research team not affiliated with the healthcare staffing company that employed the nurses, conducted the interviews to avoid any perceived implications related to the travel nurses employment.

The final question of the on-line survey asked the respondent to provide any additional comments they would like. These open response comments were coded into

major categories from which a subset of the most frequently occurring responses were developed into a survey framework for individual telephone interviews. Questions were grouped into six major topical areas. An interview guide was used to provide a framework of consistency, though it was not rigidly followed (see Appendix D).

Interviews were conducted during July and August of 2009, and continued until saturation was reached. A total of 19 interviews were completed. Two of the nurses interviewed were not working in acute care. The content associated with their interviews was not included in the analysis. The interviews were accomplished using SKYPE technology for communication and recording. (SKYPE is a software application that supports voice transmission via computer over the internet.) The audio files were transcribed verbatim as soon as was practical following the interview.

Data analysis.

A thematic analysis approach to evaluation of the interview data was used. Coding of the data was accomplished through multiple readings and re-readings of the interview transcriptions. Atlas.ti, software was utilized throughout the coding process. The constant comparative model described by Glaser and Strauss (1967) was used to continuously assess and modify the coding schema. During the coding process a total of 146 codes were synthesized into nine final categories. The final categories defined were: (a) why travel?, (b) I'm here to help, (c) part of the unit or not, (d) it's only 13 weeks, (e) travel nurses as teachers, (f) networking for next assignment, (g) orientation usually is not what is needed, (h) treat me well and I may stay, and (i) the rewards of travel nursing.

Limitations

There were several limitations to this study that deserve mention. The sample was limited to travel nurses currently working with a single large healthcare staffing company and therefore is potentially biased. Travel nurses occupy a small segment of the nursing population in general and have different demographics than the much larger population of nurses. In addition, the non-response rate of nearly 70% could have an influence on the results if the non-responders are significantly different than those nurses that responded.

Generalization of the findings to a broader population is not appropriate. Any comparison of job satisfaction of travel nurses to other nurses was accomplished through examination of the job satisfaction of permanent nurses in published literature reports, rather than in a more direct comparison using the same survey instrument under similar circumstances.

Protection of Human Subjects

As with any research on live human subjects, there were both risks and benefits to participating in this project. The research will report important information related to the job satisfaction of travel nurses. This is a research topic that has not been published to date and therefore will provide information that will assist in understanding a current gap in the existing nurse satisfaction literature. The potential risks in the study were related to privacy of information and anonymity of the participating subjects.

In order to provide protection from these risks, all participants' responses were coded such that only the research team had access to identification; assuring privacy of the information. The coding documents were stored on a computer disk that was kept in a locked cabinet at all times when not in active use by a member of the research team. No

information published will have any mention of participant by name or by category that might be identifiable, therefore protecting anonymity.

There was no undue coercion to participate in the study. Participation in the study was entirely voluntary and the participant was able to withdraw from participation at any time simply by exiting the survey prior to selecting the "finish" button or by verbally withdrawing from the individual telephone interview session. All on-line survey participants electronically signed a consent form that was included in the introductory e-mail containing the questionnaire (Appendix E). In addition, they were reminded of their agreement and understanding of participation by a concise consent statement at the end of the questionnaire itself (see Appendix A). Participants in the telephone interview were e-mailed the consent in advance of the interview session, offered the opportunity to ask any questions regarding the consent, and asked to verbally acknowledge their understanding and consent prior to beginning the interview (see Appendix C). Discontinuation or non-participation had no bearing on a potential participant's employment status and this was clearly explained in the consent as well.

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Appendix A

Travel Nurse Career Survey

I. Nursing education, licensing and experience: This section asks questions about your educational background, licensure and experience as a Registered Nurse and travel nurse.

    a. Please select the statement that best describes your current travel assignment status:

        i. On assignment less than 4 weeks at my first travel assignment

        ii. On assignment 4 weeks or more at my first travel assignment

        iii. On my second or greater travel assignment

    b. Please select the statement that best describes your initial RN education:

        i. _____ I received my basic/initial RN education **in a country other than the U.S.**

        ii. _____ I received my basic/initial RN education in the U.S. (*please go to question #d*)

    c. If you received your basic/initial RN education **in a country other than the U.S.**, please indicate the country: _____

    d. Please indicate the type of degree you received in your **basic nursing program:**

        i. _____ Diploma

        ii. _____ Associate degree

        iii. _____ Baccalaureate degree

        iv. _____ Master's degree

        v. _____ Doctoral degree

        vi. _____ Other _____

    e. Please indicate **the year** you graduated from your initial nursing educational program: _____

    f. Please indicate the *highest educational degree in nursing* you have earned:

        i. _____ Diploma

        ii. _____ Associate degree

        iii. _____ Baccalaureate degree

        iv. _____ Master's degree

        v. _____ Doctoral degree

        vi. _____ Other, please specify _____

    g. Please indicate the highest educational degree you have earned in a field *other than nursing:*

        i. _____ Associate degree

        ii. _____ Baccalaureate degree

        iii. _____ Master of Business Administration

        iv. _____ Master of Health Administration

        v. _____ Master of Public Health

        vi. _____ Doctoral degree

        vii. _____ No degrees earned in a field other than nursing

        viii. _____ Other _____

h. Do you hold any nursing certifications from a professional organization for a particular clinical or functional area (e.g. CCRN, CEN, TNCC)?
    i. ____ Yes
    ii. ____ No (skip to question #j)

i. If you answered "yes" to the previous question please indicate the specific (current) certifications that you hold (please spell out the names):

j. Please indicate the U.S. state in which you were first licensed to practice: *Listing of states*

k. Please indicate the U.S. state in which you are currently working: *Listing of states*

l. Please indicate any other U.S. states in which you are currently licensed to practice: *Listing of states*

m. How many years have you worked as a Registered Nurse:

n. How many years have you worked as a travel nurse:

o. How many years have you worked with your present travel company:

p. How many years have you worked as a RN in your present specialty:

II. Your Current Nursing Employment: The following questions pertain to your current travel assignment and your experiences as a travel nurse.
  a. Which one of the following best describes the **setting** where you work?
    i. ____ Hospital
    ii. ____ Long-term care
    iii. ____ Home health
    iv. ____ Ambulatory care
    v. ____ Mental health
    vi. ____ Hospice care
    vii. ____ Other: _____

  b. Which of the following best describes the *type* of organization where you work?
    i. ____ Academic medical center
    ii. ____ Community facility
    iii. ____ Corporate health system
    iv. ____ Other _____

  c. Is the facility at which you are currently working recognized as a Magnet facility by the American Nurses Credentialing Center?
    i. Yes
    ii. No
    iii. On the journey
    iv. Don't know

  d. Please indicate the **location** of the facility where you work:

      i. _____ Urban
     ii. _____ Rural

e. If you work on a hospital in-patient care unit, please select the type of unit where you work:

        i. _____ Critical care
       ii. _____ Emergency department
     iii. _____ Adult general/specialty (not critical care or step down)
     iv. _____ Pediatrics general/specialty (not critical care)
      v. _____ Pediatrics critical care
     vi. _____ Neonatal care
    vii. _____ Home health care
   viii. _____ Hospice unit
     ix. _____ Labor/delivery
      x. _____ Operating room
     xi. _____ Perioperative care
    xii. _____ Step-down, transitional, telemetry
   xiii. _____ Psychiatric care
   xiv. _____ Rehabilitation
    xv. _____ Float pool
   xvi. _____ Other _____

f. Please indicate the type of orientation that you received when you took your current travel assignment (select all that apply):

      i. General employee orientation on policies and procedures
    ii. A specific orientation to policies and procedures in my work area
   iii. Assigned to work with a formal preceptor or mentor
   iv. Structured classroom learning
    v. No formal orientation
   vi. Other _____

g. How many hours of orientation were provided by the employer in your current or most recent travel assignment?

h. Did your employer assign you a reduced workload while you were being oriented to your job?

      i. Yes
    ii. No

i. Indicate the degree to which each of the following reasons affected your decision to work as a travel nurse.

	None	Some degree	High degree
i. Wages	1	2	3
ii. Benefits	1	2	3
iii. Control over working conditions	1	2	3
iv. Control over work location	1	2	3
v. Control over schedule	1	2	3
vi. Get experience	1	2	3

vii. Flexible hours	1	2	3
viii. Travel/see other parts of the country	1	2	3
ix. Variety of work opportunities	1	2	3
x. Trouble finding permanent work	1	2	3
xi. Other	1	2	3

j. What is the average # of hours you work per week _____

k. What is the average hourly salary you earn in dollars _____

l. During the most recent shift that you worked, how many patients were you assigned to care for?

m. How long is the shift you usually work?
    i. ____ 8 hours
    ii. ____ 10 hours
    iii. ____ 12 hours
    iv. ____ Flexible shift hours
    v. ____ Other _____

n. What shift do you typically work?
    i. ____ Days
    ii. ____ Evenings
    iii. ____ Nights
    iv. ____ Rotate days/evenings
    v. ____ Rotate days/nights
    vi. ____ Rotate evenings/nights
    vii. ____ Other _____

o. Do you typically work year round?
    i. ____ Yes
    ii. ____ No, I work only part of a year

p. During the past month, how many times have you:

	Never	Occasionally	Weekly	Daily
Been asked to work overtime	1	2	3	4
Been required/mandated to work overtime	1	2	3	4
Believed that short staffing has affected your ability to carry out the requirements of your job	1	2	3	4
Been asked to take charge	1	2	3	4
Acted as a preceptor for another nurse	1	2	3	4
Acted as a preceptor for a student nurse	1	2	3	4
Been approached by other nurses to provide your assessment of a difficult clinical problem	1	2	3	4

q. Which of the following best describes your level of clinical nursing expertise?
    i. Beginner
    ii. Competent
    iii. Expert

    r. In general, do you believe you have the skills you need to meet the performance expectations for your job?
- i. Yes
- ii. No
- iii. Don't know

    s. Compared to your coworkers, how would your manager rate your performance?
- i. Below average
- ii. Average
- iii. Above average

    t. Compared to your coworkers, would you say that you are absent from work.....
- i. Less often
- ii. About the same
- iii. More often

    u. On the last shift you worked, would you say the quality of care given on the unit was:
- i. Below the standard of care
- ii. Adequate
- iii. Above the standard of care

III. Attitudes and feelings about my job.

Please read the three paragraphs below. After you have read all three, respond to the two questions below by indicating how much people in each category is like or not like you.

1. Category A people work primarily enough to earn enough money to support their lives outside of their jobs. If they were financially secure, they would no longer continue with their current line of work, but would really rather do something else instead. To these people, their jobs are basically a necessity of life, a lot like breathing or sleeping. They often wish the time would pass more quickly at work. They greatly anticipate weekends and vacations. If these people lived their lives over again, they probably would not go into the same line of work. They would not encourage their friends and children to enter their line of work. Category A people are very eager to retire.

2. Category B people basically enjoy their work, but do not expect to be in their current jobs five years from now. Instead, they plan to move on to better, higher level jobs. They have several goals for their futures pertaining to the positions they would eventually like to hold. Sometimes their work seems a waste of time, but they know that they must do sufficiently well in their current positions in order to move on. Category B people can't wait to get a promotion. For them, a promotion means recognition of their good work, and is a sign of their success in competition with coworkers.

3. For Category C people, work is one of the most important parts of life. They are very pleased that they are in their line of work. Because what they do for a living is a vital part of who they are, it is one of the first things they tell people about themselves. They tend to take their work home with them and on vacations, too. The majority of their friends are from their places of employment, and they belong to several organizations and clubs relating to their work. They feel good about their work because they love it, and because they think it makes the world a better place. They would encourage their friends

and children to enter their line of work. Category C people would be pretty upset if they were forced to stop working, and they are not particularly looking forward to retirement.

4. Indicate how much of each category of people was like you in reference to when you first began your career in nursing:

	Very much like me	Somewhat like me	A little like me	Not at all like me
Category A people were:	1	2	3	4
Category B people were:	1	2	3	4
Category C people were:	1	2	3	4

5. Indicate how much of each category of people is like you in reference to where you are now in your nursing career:

	Very much like me	Somewhat like me	A little like me	Not at all like me
Category A people were:	1	2	3	4
Category B people were:	1	2	3	4
Category C people were:	1	2	3	4

IV. Career and Job Attitudes: This section explores your attitudes about your job and career.

6. Please indicate how you feel about your current travel assignment and work environment by selecting the phrase (strongly disagree, somewhat disagree, neutral, somewhat agree, strongly agree) that best represents your feelings about each statement below.

		Disagree			Agree	
a.	I am happy with my current work environment.	1	2	3	4	5
b.	I am satisfied with the quality of care I am able to provide in my job.	1	2	3	4	5
c.	I would encourage other nurses to apply for a job with my employer	1	2	3	4	5
d.	My employer places a high value on the work I do.	1	2	3	4	5
e.	Overall, I am satisfied with my current job.	1	2	3	4	5
f.	I have adequate supports and resources to do my job.	1	2	3	4	5
g.	The expectations of my job are realistic.	1	2	3	4	5
h.	I usually have the time I need to spend with my patients.	1	2	3	4	5
i.	Knowing what I know now, if I had it to do all over again, I would still take the job I have now.	1	2	3	4	5
j.	I am willing to put in a great deal of effort beyond that normally expected to help my organization be successful.	1	2	3	4	5
k.	My values match those of other nurse co-workers.	1	2	3	4	5

		Disagree			Agree	
l.	I could just as well be working for a different institution as long as the type of work was similar.	1	2	3	4	5
m.	It would take very little change in my present circumstances for me to leave my job.	1	2	3	4	5
n.	My job measures up to the sort of job I wanted when I took it.	1	2	3	4	5
o.	I am often unable to complete my work by the end of my shift.	1	2	3	4	5
p.	I often take work home that I was unable to complete at work.	1	2	3	4	5
q.	I often feel like resigning my position.	1	2	3	4	5
r.	I worry that this job as a travel nurse is affecting my health.	1	2	3	4	5
s.	My employer (hospital) provided the orientation and training that I needed to function adequately in my job.	1	2	3	4	5
t.	My employer provides opportunities for me to update my skills and meet the demands of my job.	1	2	3	4	5
u.	Overall, I am satisfied with my choice of nursing as a career.	1	2	3	4	5
v.	I like being a nurse.	1	2	3	4	5
w.	I would encourage others to become a nurse.	1	2	3	4	5
x.	I would prefer another nursing job to the one I have now.	1	2	3	4	5
y.	If I have my way, I will not be working in this job (travel nursing) a year from now.	1	2	3	4	5
z.	I have thought seriously about leaving this job (travel nursing).	1	2	3	4	5

V. Self, job and patient attitudes

7. Please select the phrase that best represents your feelings about the statements below – some statements pertain to you personally, some to your job and some related to your feelings about your patients. How often:

		Never			Always	
a.	do you feel tired?	1	2	3	4	5
b.	are you physically exhausted?	1	2	3	4	5
c.	are you emotionally exhausted?	1	2	3	4	5
d.	do you think: "I can't take it anymore"?	1	2	3	4	5
e.	do you feel worn out?	1	2	3	4	5
f.	do you feel weak and susceptible to illness?	1	2	3	4	5
g.	do you feel worn out at the end of the working day?	1	2	3	4	5
h.	are you exhausted in the morning at the thought of another day at work?	1	2	3	4	5
i.	do you feel that every working hour is tiring for you?	1	2	3	4	5
j.	do you have enough energy for family and friends during leisure time?	1	2	3	4	5
k.	is your work emotionally exhausting?	1	2	3	4	5
l.	does your work frustrate you?	1	2	3	4	5
m.	do you feel burnt out because of your work?	1	2	3	4	5
n.	do you find it hard to work with patients?	1	2	3	4	5
o.	does it drain your energy to work with patients?	1	2	3	4	5
p.	do you find it frustrating to work with patients?	1	2	3	4	5
q.	do you feel that you give more than you get back when you work with patients?	1	2	3	4	5
r.	are you tired of working with patients?	1	2	3	4	5
s.	do you sometimes wonder how long you will be able to continue working with patients?	1	2	3	4	5

VI. Job demands, control & social support

8. Answer the following questions related to how you feel about the workload in your current job.

		Never	Sometimes	Often	Always
a.	Do you have to work fast?	1	2	3	4
b.	Do you have too much work to do?	1	2	3	4
c.	Do you have to work extra hard to finish a task?	1	2	3	4
d.	Do you work under time pressure?	1	2	3	4
e.	Do you have to rush?	1	2	3	4
f.	Can you do your work in comfort?	1	2	3	4
g.	Do you have to deal with a backlog of work?	1	2	3	4
h.	Do you have too little work?	1	2	3	4
i.	Do you have problems with the pace of work?	1	2	3	4
j.	Do you have problems with the workload?	1	2	3	4
k.	Do you wish you could work at an easier pact?	1	2	3	4
l.	Can you choose the methods to use in carrying out your work?	1	2	3	4
m.	Do you plan your own work?	1	2	3	4
n.	Do you set your own pace?	1	2	3	4
o.	Can you vary how you do your work?	1	2	3	4
p.	On your job, do you have the freedom to take a break whenever you wish to?	1	2	3	4
q.	Do you decide on the order in which you do things?	1	2	3	4
r.	Do you decide when to finish a piece of work?	1	2	3	4
s.	Do you have full authority in determining how much time you spend on particular tasks?	1	2	3	4
t.	Can you decide how to go about getting your job done?	1	2	3	4
u.	Does your job allow you to organize your work by yourself?	1	2	3	4
v.	Do you have full authority in determining the content of your work?	1	2	3	4
w.	Can you rely upon your immediate supervisor when things get tough at work?	1	2	3	4
x.	If necessary, can you ask your immediate supervisor for help?	1	2	3	4
y.	Can you rely upon your co-workers when things get tough at work?	1	2	3	4
z.	If necessary, can you ask your co-workers for help?	1	2	3	4

VII. Organizational satisfaction

8. Please indicate how satisfied you are with the organization you are working for in your current travel assignment.

		Dissatisfied				Satisfied
a.	The efforts the organization makes to help me feel like an important part of the company.	1	2	3	4	5
b.	The efforts the organization makes to orient me to my job and the company when I first start.	1	2	3	4	5
c.	The efforts the organization makes to explain my assignment to me.	1	2	3	4	5
d.	The efforts the organization makes to provide clear expectations on how I should do my job.	1	2	3	4	5
e.	The training the organization offers on the specific skills they request of me.	1	2	3	4	5
f.	The degree the organization values me as much as a full-time employee.	1	2	3	4	5
g.	The degree the organization recognizes my good performance.	1	2	3	4	5
h.	The efforts the organization makes to ensure I am only asked to perform the tasks I was hired to do.	1	2	3	4	5
i.	The efforts the organization makes to ensure I can work in the same area as the full-time employees.	1	2	3	4	5

VIII. Demographics: Please tell us the following information about yourself:

9. In what year were you born? _____

10. What is your gender?
   a. _____ Male
   b. _____ Female

11. What is your current marital status?
   a. _____ Single, never married
   b. _____ Married
   c. _____ Widowed
   d. _____ Separated or divorced
   e. _____ Living with a significant other

12. How many children are currently living in your home?
   a. _____ No children in home
   b. _____ 1-2 children in home
   c. _____ 3-4 children in home
   d. _____ 5 or more children in home

13. What is your current, gross annual household income (before taxes)?
   a. $15,000 or less
   b. $15,001 to $25,000
   c. $25,001 to $35,000
   d. $35,001 to $50,000
   e. $50,001 to $75,000
   f. $75,001 to $100,000
   g. More than $100,000

14. How would you describe yourself (select all that apply)?
    a. _____ African
    b. _____ Asian or Pacific Islander
    c. _____ Hispanic or Latino
    d. _____ White or Caucasian
    e. _____ Other _____

15. The research team would like to talk with travel nurses about their work experiences. Would you be willing to talk with a researcher by phone about your experiences?
    a. Yes: please contact mgates@mail.sdsu.edu and provide your contact information
    b. No

16. If there is anything else you would like to comment on, please do so here.

Appendix B

Copenhagen Burnout Inventory

Please select the phrase that best represents your feelings about the statements below.

How often:

		Never				Always
a.	do you feel tired?	1	2	3	4	5
b.	are you physically exhausted?	1	2	3	4	5
c.	are you emotionally exhausted?	1	2	3	4	5
d.	do you think: "I can't take it anymore"?	1	2	3	4	5
e.	do you feel worn out?	1	2	3	4	5
f.	do you feel weak and susceptible to illness?	1	2	3	4	5
g.	do you feel worn out at the end of the working day?	1	2	3	4	5
h.	are you exhausted in the morning at the thought of another day at work?	1	2	3	4	5
i.	do you feel that every working hour is tiring for you?	1	2	3	4	5
j.	do you have enough energy for family and friends during leisure time?	1	2	3	4	5
k.	is your work emotionally exhausting?	1	2	3	4	5
l.	does your work frustrate you?	1	2	3	4	5
m.	do you feel burnt out because of your work?	1	2	3	4	5
n.	do you find it hard to work with patients?	1	2	3	4	5
o.	does it drain your energy to work with patients?	1	2	3	4	5
p.	do you find it frustrating to work with patients?	1	2	3	4	5
q.	do you feel that you give more than you get back when you work with patients?	1	2	3	4	5
r.	are you tired of working with patients?	1	2	3	4	5
s.	do you sometimes wonder how long you will be able to continue working with patients?	1	2	3	4	5

Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress, 19*(3), 192 - 207.

Appendix C

Consent Communications (telephone interview)

Thank you for agreeing to participate in this interview. I am a co-principal investigator for this study. The research team has several questions to review with you over the telephone. The interview will take about 30 minutes of your time.

This interview is an opportunity for you to participate in research about travel nurses and their work experiences. By participating you will be contributing to the development of research that will improve the understanding of travel nurses and their important contributions to the country's hospital work force.

The only risks involved in this study are related to privacy and anonymity of information. For ease of evaluating the content of the interview, it will be tape recorded and later transcribed into written form. Your specific responses will be known only to the research team through a coding system that is secured in a password protected data file stored on a CD and located in a locked cabinet. When published, data will not be associated with a participant in any way. There is no possibility of readers associating responses or data with a particular participant.

This is a voluntary study. You are not obligated to participate and may discontinue participation at any time. Neither participation nor non-participation will have any bearing on your employment.

Appendix D

Interview Guide

Do you give your consent to participate in this study?

Will it be OK to tape record this interview?

Do you have any questions at this time?

Great, then let's get started:

The first group of questions are demographic in nature:
    What is your current marital status?
    How many children are currently living in your home?
    How would you describe your race/ethnicity?
    How old are you?
    What is the highest degree you have earned in nursing?
    In what state are you currently working?
    Is the hospital at which you are working a Magnet facility?
    What type of floor are you currently working on?
    What is your specialty?

This next group of questions explores your reasons for choosing travel nursing.
    How long have you been a travel nurse?
    Describe the most significant reasons why you became a travel nurse.
    How long do you expect to continue traveling?
    What are the main reasons that would cause you to continue as a travel nurses?
    What are the main reasons why you would choose not to continue as a travel
nurse?

We've learned that assignment quality varies greatly.
    Please describe some of the issues (travel organization and the health care
    organization) that you've experienced that may have made an assignment good or
    bad.
    How have you been treated by the health care organizations and their staff in your
    various assignments? Can you provide any insight as to why this was the case?
    What were the reasons for this, do you believe?
    How important is the relationship that you have with your Recruiter?
    Describe what you would define as critical aspects of a great relationship as well
    as hallmarks of a poor one.

Travel nursing seems to be quite stressful.
    What are the aspects of travel nursing that makes it stressful or less stressful from
    a work perspective versus personal perspective?

Travel nursing as a means of improving self as a person and a nurse.

     In what ways has travel nursing made improvements in you as a person or a nurse?

Nursing profession.

     How has our perception of nursing as a profession changed since you were first licensed as a Registered Nurse?

OK, that is the end of my prepared questions. Do you have any further comments you would like to make?

Thank you very much for your time. Your passion for travel nursing really shows and we

appreciate your feedback. Have a great day.

Appendix E

Consent Communications (online survey)

Invitation e-mail Text

Subject: Opportunity to participate in research about travel nurses

We would like to present an exciting opportunity for you to participate in first-of-its-kind research about travel nurses and their work experiences. By taking the time to complete the survey (enclosed within the link below) you will be contributing to the development of research that will improve the understanding of travel nurses and their important contributions to the country's hospital work force.

The study is being conducted jointly by Michael Gates, PhD, RN from San Diego State University and Marcia Faller, MSN, RN from AMN Healthcare (and a doctoral student at the University of San Diego).

As a travel nurse, you are invited to participate in a research study exploring career aspects of travel nurses. You are being asked to participate in this study because you are currently employed as a RN at an organization through a travel staffing agency. Participation is voluntary and requires only responding to a short on-line questionnaire. *Your completion of this survey indicates that you have read the informed consent in the paragraph below,, and that you agree to participate in this voluntary and confidential survey.* The questionnaire will take about 30 minutes of your time.

So that you fully understand the use of the information you will be providing, a complete disclosure of the risks involved follows as well as a description of the controls in place to mitigate those risks. The only risks involved in this study are related to privacy and anonymity of information. Your specific responses will be known only to the research team through a coding system that is secured in password protected data file stored on a CD and located in a locked cabinet. When published, data will not be associated with a participant in any way. There is no possibility of readers associating responses or data with a particular participant.

This is a voluntary study. **All participants' names will be entered into a drawing from which two will be selected to receive $150 gift cards.** You are not obligated to participate and may discontinue participation at any time. Neither participation nor non-participation will have any bearing on your employment.

Please click the link below to enter the survey and participate in the study.

If you have any questions, please contact Dr. Michael Gates at mgates@mail.sdsu.edu or Marcia Faller at marcia.faller@amnhealthcare.com

Closing consent: at completion of questionnaire before submission

Congratulations, you have completed the survey. Thank you very much for your time and commitment to improve the understanding of travel nurses. Your name will be entered into the drawing for two $150.00 gift cards.

By clicking the "finish" button below, I agree to participate in this study under the conditions explained in the introductory message.

UNIVERSITY OF SAN DIEGO

Hahn School of Nursing and Health Science

Travel Nurse Job Satisfaction: What Nurse and Workplace Characteristics Matter?

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Abstract

The literature has no published research about travel nurses to date. This study describes travel nurses and compares them demographically to the general nurse population. Job satisfaction of travel nurses was also examined in a multiple regression analysis of on-line surveys. The predictive nature of various nurse characteristics and attributes of the workplace on overall nurse job satisfaction was explored. Travel nurses were younger, more often male and more likely to hold a baccalaureate nursing degree than their counterparts in the general nurse population. Travel nurses were more satisfied in hospitals with Magnet designation than those without. The study has implications related to the importance of Magnet designation on nurse satisfaction. It contributes to the limited literature on temporary nurses.

In recent years, as travel nursing has become increasingly recognized as a strategic staffing alternative by nursing administrators, it has also become a more attractive career option for nurses. Hospital nursing administrators turn to travel nurses as an effective and flexible mechanism to maintain safe staffing levels and deliver consistent, high quality patient care. In addition, travel nurses allow nurse administrators the ability balance short-term expenditures within their budgets.

Travel nursing as a form of supplemental staffing has earned a place in strategic staffing management for several reasons. First, a 13-week travel assignment provides both coverage for short-term defined staffing needs, while contributing continuity and consistency of care not found in other forms of supplemental staffing. For example, often a unit may experience unanticipated census increases, several leaves of absence in the ranks of the permanent staff, a number of nurses retiring in a short span of time, or anticipated seasonal bursts in census. In each of these situations, an increased need for staffing is present and of short duration, in which case hiring an additional full time staff nurse would not be appropriate or cost effective.

Second, travel nurse staffing has advantages over standard recruitment in that the entire country is a recruitment base, rather than a much smaller geographical locale such as a city or metropolitan area. Nurses are recruited from across the United States and usually travel to, and work in, another part of the country. This mobility of nurses can actually augment a hospital's permanent staff if the hospital is able to recruit the traveler to stay on in a regular staff position once the travel assignment is complete.

Third, the 13-week assignment gives both the travel nurse and the hospital ample opportunity to explore the fit (mutually) prior to making a long-term commitment. In addition, travel nurses have a myriad of experiences at different hospitals and geographic locations that give them knowledge of various best practices that may influence patient care positively. Finally, travel nurses provide an unfiltered, outsider perspective of how a hospital organization treats its staff.

Over the past decade there has been a surge in the use of travel nurses, yet our understanding of these nurses remains limited. Even with the recent downturn in the economy, the use of travel nurses remains a viable mechanism for strategic staffing in hospitals. As of 2007, travel nurses made up about 20% of the population of temporary nurses, which was about 5-6% of hospital-employed nurses (Osborne, Calvi, & Hessinger, 2007) or about 1% of total hospital-employed nurses (roughly 20,000 nurses). While this seems like a relatively small number, travel nursing continues to be an attractive employment alternative for many nurses.

Travel nurses are a unique type of nurse. They have the flexibility to move around the country according to a plan that they create and command. Their choices for assignments are related to their own specific needs; a desire to live in a specific geographic location, a need to work in a particular type of hospital, or the opportunity to obtain certain unit or specialty experience. A travel nurse's plan is only limited by the availability of the demand for their services. Travel nurse work opportunities abound in a shortage situation, and together with a growing economy create a climate that tends to attract even more nurses to test this new way of working. To many nurses who may feel

burned out or frustrated by nursing in their current position, travel nursing can be a way to step back from the pressures of a full time position.

Travelers, while only minimally committed to a particular assignment, often extend their work assignment, preventing the additional orientation costs of bringing on new travelers, and may even be convinced to sign on as permanent staff. On the other hand, when travelers are not satisfied with their work environment, they are less likely to extend and/or convert. It is important to understand the drivers of travel nurse job satisfaction because satisfied staff are more productive (Shaver & Lacey, 2003) and are more likely to stay on the job (Roberts, Jones, & Lynn, 2004).

In addition, the traveler community is a tightly knit one and word of hospital experiences both good and bad, "travels" quickly throughout the country. Hospitals that are welcoming to travel nurses earn good reputations in the traveler community and can thereby more easily recruit, not only high quality travelers, but permanent staff nurses to their setting. Travel nurses provide a unique window into the study of nurse satisfaction because they have worked at many different hospitals, allowing them to gain a critical perspective on how different aspects of the work environment contribute to a positive work experience. They offer an unbiased assessment of the facilities workplace because they are outsiders, with less risk associated when offering a truthful view of the environment (Domeyer, 1999).

It is important to study this group of nurses for several reasons: (a) very little is known about travel nurses due to a lack of published research, (b) after decades of research on job satisfaction of nurses, true solutions to improve satisfaction have proven elusive, and (c) travel nurses can provide unique insight because of their experience in a

wide variety of hospital facilities. Nursing remains in the midst of a significant shortage, therefore, the satisfaction or dissatisfaction of nurses remains a priority for hospital administrators. The purpose of this study was to explore the relationship between travel nurse job satisfaction, various travel nurse attributes, and workplace characteristics. The specific aims were to: (a) describe the characteristics of travel nurses (demographic – age, gender, children; professional – education, tenure as a travel nurse, specialty unit, number of patients on last shift), (b) determine what workplace characteristics (Magnet designation, profit versus not-for-profit, private versus government, number of beds) were associated with travel nurse job satisfaction, and (c) examine the relationship between hospital characteristics and travel nurse job satisfaction.

Job Satisfaction

There is extensive research examining nurse job satisfaction. Research has reported on nurse characteristics and workplace attributes as the two primary categories contributing to the job satisfaction phenomenon (Ingersoll, Olsan, Drew-Cates, DeVinney, & Davies, 2002; Ma, Samuels, & Alexander, 2003). Since retention of nurses (their intention to stay in the job) has been linked positively with satisfaction (Roberts et al., 2004), understanding what specific nurse and workplace attributes improve satisfaction is of interest in nursing research.

Nurse Characteristics

Nurse characteristics are those attributes that are related to the nurse as a person; such as age, gender and whether or not they have children. In addition, other nurse characteristics are those aspects related to their professional practice of nursing; as in their educational background, length of time with their travel company, and the specialty

in which they practice. Because the number of patients assigned to a nurse is associated with the practice specialty; patient load is included within the professional nurse attributes even though there may be some degree of crossover due to decisions made regarding staffing levels within the workplace. Whether nurse characteristics are those personal attributes or professional, the literature is not entirely consistent regarding the impact of these attributes on satisfaction.

Nurse personal attributes.

Ma et al (2003), examined the nurse factors of age, years of experience and salary as they related to job satisfaction. Of these variables only years of experience exhibited a statistically significant relationship to job satisfaction. Another group of researchers found that older nurses exhibited higher levels of satisfaction than younger nurses (Ingersoll et al., 2002). In a study examining job enjoyment in nurses, researchers found evidence of a positive association between age and job enjoyment (Wade et al., 2008). Although research exploring specific nurse personal attributes has inconsistently been linked to nurse satisfaction in hospital-employed nurses, these attributes have not been studied with the travel nurse population. Thus, we have included 3 nurse personal attributes in our study: (a) age, (b) gender, and (c) children living at home.

Nurse professional attributes.

Many studies examining nurse satisfaction have also included professional attributes of nurses. Ingersoll et al (2002) also examined the impact of education on satisfaction and found that those nurses with master's degrees had higher job satisfaction than those with baccalaureate degrees or less. In addition to autonomy and critical thinking skills, educational level had an important association with job satisfaction. In a

recent study Zurmehly (2008) found nurses with baccalaureate degrees exhibited the

highest levels of satisfaction followed by master's prepared nurses, nurses with

associate's degrees and finally diploma prepared nurses. In contrast, Ma and colleagues

(2003), found no significant relationship between level of education and job satisfaction.

The research suggests that it is important to include professional attribute variables when

exploring nurse job satisfaction, therefore, we have included the following professional

attributes in our study: (a) education, (b) tenure with travel, (c) unit specialty, and (d)

number of patients cared for on the last shift.

Workplace Attributes

The evidence supporting the work environment as the primary "culprit" in nurse's

dissatisfaction is very strong. Nurses working in hospitals were more dissatisfied in their

jobs than other workers in professional jobs and other workers in general (Aiken et al.,

2001). Nurses working as staff in hospitals were more dissatisfied than hospital nurses

holding other roles (Ma et al., 2003) and job dissatisfaction in nurses was the primary

predictor of intent to leave (Larrabee et al., 2003). Hospital features such as size and type

are often controlled for in studies examining nurse staffing (Needleman, Buerhaus,

Mattke, Stewart, & Zelevinsky, 2002). In this study we have included the following

workplace-related variables: (a) number of beds, (b) profit versus not-for-profit, (c)

government versus private, and (d) Magnet designation.

Through 3 decades of work and a variety of researchers, the preponderance of the

evidence points to the characteristics of the work environment as having the strongest

relationship to nurse's job satisfaction (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002;

Blegen, 1993; McClure, Poulin, Sovie, & Wandlet, 2002). The literature suggests that a

variety of work environment characteristics including short staffing, poor nurse-physician collaboration, and lack of recognition and support from the manager can contribute to job dissatisfaction (Aiken, Clarke, Sloane, Lake, & Cheney, 2008; Manojlovich & DeCicco, 2007; Shaver & Lacey, 2003). Other research described a perception of conflict in the workplace as a predecessor for dissatisfaction (Almost, 2006; Cox, 2003).

In turn, job dissatisfaction was highly correlated with intent to leave (Larrabee et al., 2003; Roberts et al., 2004). Nurses working in hospitals with low turnover showed higher job satisfaction and commitment to the organization and lower intent to leave. These nurses also exhibited lower levels of burnout (Stordeur & D'Hoore, 2007). Shaver & Lacey (2003) examined work setting, job commitment, job tenure, years until retirement, short staffing, and patient load, and found short staffing to be the most consistent significant factor related to dissatisfaction. Other researchers found that higher levels of autonomy, control over the work environment and strong nurse-physician collaboration produced both higher levels of trust in management and lower levels of burnout resulting in higher job satisfaction (Laschinger, Shamian, & Thomson, 2001).

Magnet Designation

Searching for solutions to solve their own nurse recruitment and retention problems, more and more hospitals are recognizing the American Nursing Credentialing Center's (ANCC) Magnet hospital designation® as a best practice. The central idea involved in the Magnet concept is that certain work environment characteristics tend to "attract" nurses to those hospitals that exhibit these characteristics, much like a magnet is attracted to metal (McClure et al., 2002). Also, like a magnet, the nurses "stick" to those designated hospitals in the form of improved retention. There is a significant relationship

between nurse empowerment and the Magnet hospital characteristics of autonomy, control over the practice environment and positive relationships with physicians (Laschinger, Almost, & Tuer-Hodes, 2003). In their study, Laschinger et al (2003) went on to demonstrate that the combination of empowering working conditions and Magnet hospital characteristics had a significant and positive relationship with nurse job satisfaction. In an earlier study, Laschinger et al (2001) described a link between the same Magnet characteristics of autonomy, control over the practice environment, physician-nurse relationships, and staff nurse's trust in management; which ultimately was reflected in nurse retention and their perception of quality patient care. The fundamentals in the Magnet program are rooted in research that has been compiled over the years, much of which is related to satisfaction of staff nurses and their retention (McClure et al., 2002).

Methodology

Sample

Survey data were collected from a large national healthcare staffing organization in the United States during the entire calendar year 2008. A self-report questionnaire was distributed via email to 14,544 travel nurses approximately 3 weeks prior to the completion of their 13-week travel nurse assignment with a hospital facility. A total of 3,633 travel nurses completed the survey for a response rate of 25%. Due to incomplete surveys, the final sample consisted of 2,889 travel nurse responses. It is important to note that since travel nurses work only 13-week assignments it was possible for an individual travel nurse to complete multiple surveys during 2008. Thus, the sample of 2,889 represents 2,496 unique travel nurses of which 356 filled out multiple surveys. In

addition, some of the travel nurses were working at healthcare facilities that were not acute care hospitals. Eliminating these non-hospital employed nurses from the sample resulted in a final sample of 2813.

Surveys were distributed via email, and travel nurses who chose to participate completed the survey questionnaire online. Travel nurses were told that their responses would be confidential; each survey was identified only with a unique ID number. As reported in Table 1, the travel nurses surveyed were on average 37.1 years old (SD=11.3) and had been working with their current healthcare staffing organization for 1.9 years (SD=2.05). Overall, the typical travel nurse was female (89.8%), did not have children currently living at home (87.6%), was educated at the baccalaureate level (49.5%), worked primarily on a medical-surgical (22.7%) or intensive care (18.9%) unit, and cared for an average of 4.8 (SD=2.4) patients per shift.

Measurement

Nurse satisfaction.

Nurse satisfaction was measured in 3 distinct ways. The first involved a 7-item satisfaction scale designed for this study that was used to capture a travel nurse's overall satisfaction with their assignment. The items specifically attempted to capture the travel nurse's satisfaction with their overall facility experience, staff friendliness toward travel nurses, the nurse manager, quality of orientation, patient safety, learning new nursing skills, and RN staffing levels. Each item was scored using a 4-point Likert-type scale with rating categories of excellent, good, fair and poor. The mean score for this scale was 2.87 (SD=0.69) with higher scores indicating higher levels of satisfaction. The coefficient alpha for the scale was 0.88.

In addition, travel nurse satisfaction was measured with 2 specific questions that asked the travel nurse whether they would be willing to work at the facility again or whether they would be willing to recommend the facility to a friend or colleague. These questions were asked using a 4-point Likert-type scale with rating categories of very likely, somewhat likely, somewhat unlikely and very unlikely. The mean score for the likelihood to work at a same facility again was 2.85 (SD=1.16) with higher scores indicating more likelihood to return. Similarly, the mean score for the likelihood of recommending the facility to friends or colleagues was 2.90 (SD=1.15).

Travel nurse attributes.

Since travel nurses have not been studied extensively in the satisfaction literature, various travel nurse attributes were collected as independent variables in this study. The specific demographic information collected was age, gender, and the number of children living at home. In addition, professional nurse attributes such as type of nursing education (diploma, associate, baccalaureate, or graduate), tenure with the travel nurse organization, type of specialty unit the nurse was working on (i.e. medical-surgical, pediatrics, ICU, etc.) type of organization, and the number of patients the nurse cared for on their last shift were also collected.

Workplace attributes.

Research also indicates that workplace attributes may play a role in a nurse's satisfaction; therefore, several workplace attributes were collected for this study. Hospital facility information such as location, facility type (profit versus not-for-profit and private versus government), number of beds, and Magnet status were collected from data available from the American Hospital Association and merged into the traveler response

data utilizing a unique facility identifier. In this study (Table 1) the typical hospital

facility had on average 390 (SD=231.65) beds and was classified as a private (87.5%),

not-for-profit (84.3%), and non-Magnet (77.5%) hospital located outside the state of

California (78.3%).

Data Analysis

Ordinary least squares regression was the primary statistical method utilized to

evaluate the aims outlined in this study (i.e., the associations among travel nurse

satisfaction and travel nurse and workplace attributes). All analyses were performed

using the statistical program STATA version 10. The survey commands in STATA

(where the individual travel nurse was set as the primary sampling unit) were utilized in

the regression analyses to control for the fact that individuals could potentially participate

multiple times. Further, when utilizing the survey commands in STATA, robust standard

errors were automatically reported which accounted for any heteroskedascity in the error

term. Finally, multicollinearity was not viewed to be a serious problem since all

tolerance values were greater than 0.1.

Results

Table 1 provides the descriptive statistics for the measures utilized in this study.

Table 2 compares the unique travel nurse demographics (n=2813) with the general

hospital facility based nursing population (data from the 2004 national sample survey of

registered nurses). Travel nurses were on average about 6 years younger, fewer travel

nurses had children living in the home, and there were a higher percentage of males

among travel nurses. Nearly half of travel nurses held a baccalaureate degree in nursing

compared with only 38.5 % in the hospital facility based nurse population, however, a much lower number of travel nurses held a graduate degree in nursing.

The results related to the primary aims of the study are summarized in Table 3. The dependent variables were examined in 3 different models: (a) model 1 - overall satisfaction was computed by combining and averaging the responses to the six satisfaction-related questions, (b) model 2 - the likelihood of a travel nurse returning to the facility in the future, and (c) model 3 - whether the nurse would recommend the facility to a friend or colleague. Hypotheses were evaluated by examining the beta coefficients on the specific travel nurse and workplace attributes.

In model 2 (the likelihood of a travel nurse returning to the facility in the future) the nurse attribute variables for age and children living at home had statistically significant positive beta coefficients, R^2 = .0477, F(23, 2883) = 6.06, p<.001. Likewise, in model 3 (whether the nurse would recommend the facility to a friend or colleague) both age and children living in the home produced statistically significant results, R^2 = .0453, F(23, 2813) = 7.83, p<.05. Older nurses and those with children living at home were more likely to return to the facility where they were currently working and more likely to recommend that facility to other travel nurses. None of the nurse attribute variables resulted in significant findings in model 1 (overall satisfaction).

The nurse professional attribute variables were educational level and tenure within the healthcare staffing organization (travel tenure) and were not significantly related to any of the satisfaction models. Analyses involving the type of unit the travel nurse worked on resulted in significant positive beta coefficients for nurses working on pediatric units, other specialty units, and psychiatry units for models 1 and 3 and only

psychiatry units for model 2. These findings indicate that nurses working on these units were more satisfied than nurses working on a medical-surgical unit. Finally, the analyses involving the number of patients a travel nurse cared for on their last shift resulted in a significant negative beta coefficient in all 3 models, indicating that travel nurse satisfaction decreases as the number of patients cared for increases.

The analyses involving workplace characteristics had consistent findings across all 3 satisfaction models. Significant positive beta coefficients were found for nurses working in Magnet facilities, while significant negative beta coefficients were found for bed size. These results indicated that nurses working in Magnet designated facilities were more satisfied than those working in facilities without a Magnet designation. Further the results indicated that as facility bed size increases, travel nurse satisfaction decreases. Finally, travel nurses working in for-profit hospitals were less likely to recommend the facility to colleagues than those working in not-for-profit facilities.

Because the sample was limited to a convenience sample of travel nurses currently working with a single healthcare staffing company as opposed to a representative random cross-sectional sample, the responses are potentially biased. In addition, travel nurses are a small segment of the nursing population and had different demographics than the much larger population of nurses. Therefore, generalization of the findings to a broader population is not appropriate.

Discussion

Travel nurses have different characteristics than the general nurse workforce. They are younger, fewer have children in the home and more are male. Travel nurses are potentially moving to a new location and changing jobs every 3 months. Job change and

major moves are both events commonly understood to contribute to increased levels of stress. In addition, travel nurses must learn their new job with less than optimal orientation (usually a matter of a few days) and must be able to quickly find resources to help them adapt more easily to the new environment. Perhaps younger nurses and those without the responsibilities that go with having children in the home are more suited to the travel nurse lifestyle because they are less likely to have multiple other factors demanding their time and attention.

It is interesting that the regional locations of hospitals had no significant bearing on satisfaction of travel nurses. Given the findings related to staffing level, one might expect nurses to be more satisfied if they are working at a hospital in California (the only state in the nation with mandated nurse–to-patient staffing ratios). This non-significant finding is most likely due to; (a) care delivery changes that have been made to meet ratios while at the same time meeting hospital financial expectations (these changes have potentially given nurses responsibilities held by others in the past, e.g. transport of patients) and (b) that the national focus on quality over the recent years has resulted in hospitals across the country more consistently providing for staffing resources that are known to contribute to positive outcomes.

The concept that nurses in certain specialties exhibit differences in job satisfaction has garnered little attention in the literature. Our findings demonstrate that travel nurses working in pediatrics and psychiatry are more satisfied than others. It is not possible to discern from the results if the specialty itself results in improved job satisfaction or that nurses choosing to practice in pediatrics and psychiatry have specific attributes that

resulted in increased satisfaction. Nonetheless, the findings add to the small amount of literature available on the subject of travel nurses.

Travel nurses are similar to the general nurse workforce in their reports that higher numbers of patients assigned contributes to dissatisfaction. Staffing levels that allowed for a lower patient load was a significant predictor to nurse's job satisfaction in all 3 of the analytic models in this study. Much has been written about the link between staffing levels, nurse job satisfaction and quality outcomes (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Mark, Harless, McCue, & Xu, 2004; Mark, Salyer, & Wan, 2003; Needleman, Buerhaus, Mattke, Stewart, & Zelevinsky, 2002) though ideal staffing levels have yet to be determined. Developing evidence in support of the relationships between job satisfaction and its associated turnover intent; and staffing levels, provides more rationale to continue to work toward staffing and workplace solutions that will not only improve quality, but also result in higher job satisfaction. Travel nurses clearly agree that a heavier patient load reduces their satisfaction on the job. Together with previously published research related to Magnet designation, the results of this study contribute to the evidence supporting the importance of organizational practice and policy.

Most important was the finding that supports Magnet hospital designation as a contributor to job satisfaction in travel nurses. Travel nurses are an excellent data source to explore whether Magnet really makes a difference, because data can be collected at multiple Magnet and non-Magnet sites across the country during the same time period. Often individual hospitals may take measurements "before" and "after" Magnet designation in order to justify the journey. Even if these measures show positive results, their use is not generalizeable. Numerous Magnet-designated facilities were involved in

the results of this study and the findings clearly indicate that Magnet does indeed make a difference.

Aiken's landmark study describes the workplace as creating an environment for burnout and dissatisfaction, and further adds support that both are direct predictors of intent to leave (Aiken et al., 2002). Others postulate that research is too narrow if it only examines environmental characteristics and assumes that all nurses value these characteristics to the same degree (Takase, Maude, & Manias, 2005). Support for the idea that nurses place different value on various workplace characteristics was found in another study in which nurse's satisfaction was higher when they desired more control over the workplace and were given it; yet satisfaction was lower if they were given more control and did not desire it (Ingersoll et al., 2002). Whether the work environment has positive attributes like those found in Magnet-designated hospitals, will not alone result in satisfaction and retention of nurses. Rather, the mis-fit between an individual nurses' needs and an organizations' expectations can, in and of itself, produce dissatisfaction and turnover intention (Ingersoll et al., 2002).

Sadly, even newly graduated nurses are showing significant signs of unrest. New nurses who indicated an intent to leave their current position demonstrated lower satisfaction scores than those with no intent to leave (Roberts et al., 2004). A recent study examined the job satisfaction and longevity of new graduates and found that 30% of new graduates left their job within the first year of employment. At the two year mark, a full 57% had left (Bowles & Candela, 2005). Caring for hospitalized patients during the next decades will be extremely difficult with the current "burn rate" of our nurses. The present nursing shortage is not projected to end anytime in the next two decades. Rather, it is

predicted to become the most severe shortage ever, with some estimates ranging from a conservative 285,000 nurses short (Buerhaus et al., 2009) to those approaching 1 million nurses by 2020 (United States Department of Health and Human Services, 2006). Given a sustained and severe shortage of nurses, it becomes practical and even necessary to learn more about how happy nurses are in their jobs and even more importantly what causes them to be dissatisfied and leave their jobs or even leave the profession altogether. Studying travel nurses will be important to continue to develop our knowledge of job satisfaction in a particular segment of nurses and will aid in developing a beginning understanding of the motivations of nurses who choose to work as supplemental staff.

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Table 1

Travel Nurse Descriptive Statistics

Variable	Mean	Std. Dev.
Overall satisfaction	2.87	0.69
Work at facility again	2.85	1.15
Recommend facility	2.90	1.15
Age	37.10	11.27
Children at home	12.44%	----
Male	10.17%	----
Diploma	6.79%	----
Associate degree	41.41%	----
Bachelor's degree	49.52%	----
Graduate degree	2.27%	----
Number of patients	4.83	2.36
Travel tenure	1.94	2.05
Telemetry	14.47%	----
Pediatric	4.55%	----
Peri-operative	7.93%	----
ICU	18.88%	----
Other specialty	4.62%	----
Psych	0.67%	----
ER	12.41%	----
Mother baby	6.11%	----
NICU	4.23%	----
PICU	3.41%	----
Medsurg	22.72%	----
Government facility	12.48%	----
For profit	14.75%	----
Not Magnet	77.50%	----
Not in California	78.35%	----
Number of beds	389.84	231.65

N=2813

Table 2

Travel Nurse Comparison to National Sample Survey

	2008 Survey of Travel Nurses N=2813	2004 National Sample Survey of Registered Nurses (DHHS)
Female	89.8%	92.6%
Male	10.2%	7.4%
Have children in the home	12.4%	48.6%
Age	37.1 years	43.3 years
Bachelor's degree	49.5%	38.5%
Associate degree	41.4%	37.9%
Diploma	6.8%	14.1%
Graduate degree	2.3%	9.5%

Table 3
Satisfaction Regression Results

	Model 1: Overall satisfaction			Model 2: Work at same facility again			Model 3: Recommend facility as a good place to work		
	N=2813			N=2813			N=2813		
	β Coef.		Std. Err.	β Coef.		Std. Err.	β Coef.		Std. Err.
Age	1.5×10^{-3}		0.00	0.01	***	0.00	0.01	*	0.00
Children living at home	0.04		0.04	0.18	**	0.06	0.14	*	0.06
Male	-0.05		0.04	4.2×10^{-3}		0.07	-0.04		0.07
Diploma	-0.03		0.05	-0.05		0.09	-0.09		0.09
Associate	0.02		0.03	0.08		0.05	0.07		0.05
Graduate	0.06		0.07	0.22		0.15	0.17		0.14
Number of patients	-0.04	**	0.01	-0.05	**	0.02	-0.05	**	0.02
Travel tenure	5.4×10^{-3}		0.01	0.02		0.01	0.02		0.01
Telemetry unit	-0.05		0.04	2.9×10^{-3}		0.07	1.1×10^{-3}		0.07
Pediatric unit	0.18	**	0.07	0.07		0.10	0.24	*	0.11
Peri-operative unit	0.04		0.07	1.6×10^{-4}		0.11	0.02		0.11
ICU unit	-0.10		0.06	-0.13		0.09	-0.12		0.09
Other specialty unit	0.25	***	0.07	0.21		0.11	0.24	*	0.12
Psychiatry unit	0.56	***	0.13	0.72	***	0.18	1.00	***	0.13
Emergency Room	0.07		0.05	0.10		0.08	0.14		0.08
Mother baby unit	-0.05		0.06	-0.12		0.12	-0.08		0.11
NICU unit	-0.04		0.08	-0.07		0.12	-0.02		0.12
PICU unit	0.02		0.09	0.82		0.14	0.12		0.14
Facility not in California	-0.01		0.03	0.04		0.05	0.02		0.05
Government facility	0.02		0.04	-0.05		0.07	0.01		0.06
For profit facility	-0.07		0.04	-0.14	*	0.06	-0.23	***	0.06
Magnet facility	0.14	***	0.03	0.28	***	0.06	0.23	***	0.06
Number of Beds	-2.5×10^{-4}	***	0.00	-3.2×10^{-4}	**	0.00	-3.8×10^{-4}	***	0.00
Constant	3.02		0.09	2.67		0.14	2.91		0.14
F-statistic	5.03	***		6.06	***		7.83	***	
R-squared	0.0448			0.0477			0.0453		

* $p < .05$
** $p < .01$
*** $p < .001$

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Burnout, Job Dissatisfaction and Intent to Leave Among Travel Nurses

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Abstract

Travel nurses are frequently used to supplement nursing staff in acute care hospitals, especially in times of shortage. This research study examines burnout, job dissatisfaction and intent to leave in travel nurses, a population that has not been studied previously.

Slightly more than half of nurses are satisfied with their jobs, compared with other

healthcare professionals, 65% to nearly 80% of whom express job satisfaction (Smith,

2007). Hospitals employ the vast majority of Registered Nurses, approximately 60% of

the total nursing workforce (Bureau of Labor Statistics, 2006). Nurses working in

hospitals are less satisfied than those who work in other environments. The work

environments of hospitals are strong contributors to nurse dissatisfaction and burnout

(Aiken, Clarke, Sloane, Lake, & Cheney, 2008; Manojlovich & Laschinger, 2007; Shaver

& Lacey, 2003). With a shortage of RNs projected to rise to 240,000 by 2025 (Buerhaus,

Auerbach, & Staiger, 2009), correcting problems related to work environments that

produce dissatisfaction and burnout is critical.

This article presents the results of an investigation of burnout in travel nurses, a

group of nurses not studied previously. Travel nurses make up only a very small portion

of the hospital workforce, yet their numbers have been growing. According to Staffing

Industry Analysts, a research and analysis firm that covers the U.S. contingent workforce,

there were roughly 18,000 travel nurses in 2007 (Osborne, Calvi, & Hessinger, 2007). Of

nurses living in California, 3% work for a registry or per diem agency and 1.2 % work as

travel nurses. For these nurses, wages were cited as the predominant reason for working

as temporary nurses, but over half reported that they work temporarily in order to have

better control of their work schedules (California Board of Registered Nursing, 2008).

The number of nurses currently working in travel positions is a small percentage

of the total nurse population, though the volume of nurses that transition through at least

one travel nurse position in a given year is estimated at two to three times the number working as travel nurses at any given point in time (R. Henderson, personal communication, October, 2009). Since most travel nurses left a regular hospital staff nurse position to become travel nurses, developing a better understanding of the motivations and characteristics of travel nurses as they relate to job and career satisfaction may be important in understanding the current high levels of job dissatisfaction and intent to leave reported among professional nurses.

The purpose of this study was to examine the relationships of nurse attributes and hospital attributes to burnout, job satisfaction, and intent to leave in travel nurses. The study was designed to address the following hypotheses:

1. Travel nurses with higher burnout levels will have attributes that are significantly different from travel nurses with lower burnout; travel nurses with lower burnout are likely to be older and more experienced.

2. Variables that reflect the quality of the work environment, such as Magnet designation, will exhibit a stronger influence on burnout and intent to leave than other nurse and hospital attributes.

3. Travel nurses working at hospitals with Magnet designation will have higher levels of job satisfaction.

Literature Review

In a study examining newly graduated nurses, 30% had left their first job within one year of employment, and 57% had left prior to the two-year mark (Bowles & Candela, 2005). The American Nurses Association (2009) has consistently expressed

concern over nurses leaving the profession, and in a recent survey, 53% of nurses were considering leaving their current positions.

The literature suggests that a variety of work environment characteristics, including short staffing, poor nurse-physician collaboration, and lack of recognition and support from management, can contribute to job dissatisfaction (Aiken et al., 2008; Manojlovich & Laschinger, 2007; Shaver & Lacey, 2003). Some researchers have described a perception of conflict in the workplace as a precursor to dissatisfaction (Almost, 2006; Cox, 2003).   Others report that job dissatisfaction is highly correlated with intent to leave (Larrabee et al., 2003; Roberts, Jones, & Lynn, 2004). Research continues in the area of work environment contributions to nursing dissatisfaction and burnout; however, no real solutions have been found. The Magnet Recognition Program® is one potential solution, yet evidence for its success is limited.

Nurse Characteristics

Various studies have examined a multitude of individual attributes and their relationship to job satisfaction. Attributes studied include age, length of time in one's current position, family income, marital status, race, job position, educational level, gender, and nursing specialty (Ellenbecker, 2004). Of these characteristics, age, length of time in the current position, and positions outside of acute hospital staff nursing were most commonly associated with job satisfaction (Ingersoll, Olsan, Drew-Cates, DeVinney, & Davies, 2002; Norman et al., 2005; Wade et al., 2008).

Nursing specialty may play a role in the job satisfaction of acute care staff nurses and has been explored in a few studies. Findings have been inconclusive; for example, nurses working in psychiatric units and long-term care facilities were less satisfied than

nurses working in other direct patient care units (Wade et al., 2008); and neonatal

intensive care and pediatric nurses were more satisfied than their counterparts in adult

medical surgical intensive care units and adult medical surgical units (Roberts et al.,

2004; Schmalenberg & Kramer, 2007).

As noted earlier, most nurses work in hospitals. The natural progression for most

nursing careers begins with acute care staff nursing. As a nurse pursues a career over

time, however, he or she is likely to move out of direct patient care in hospitals and into a

variety of other options - management or administration, home health or

public/community health nursing, informatics or other technology-related opportunities,

school nursing, academia, or a myriad of advanced practice positions. All of these

opportunities exist outside of direct patient care in hospitals, where it seems nurses are

the most dissatisfied. A transition into any of these opportunities is more likely to occur

as nurses get older, have more expertise, or gain more education – all of which are

significantly related to job satisfaction (Ma, Samuels, & Alexander, 2003; Zurmehly,

2008).

Organizational Characteristics

While individual characteristics have been related to job satisfaction,

organizational and unit attributes of hospitals may be equally or even more important

(Adams & Bond, 2000; Blegen, Vaughn, & Vojir, 2008; Laschinger, Finegan, &

Shamian, 2001) and have occupied the preponderance of research in the past fifteen

years. This research has focused on variables such as empowerment, transformational

leadership, and collaborative practice.

Empowerment is an organizational attribute that regularly appears in the literature as a contributing factor in job satisfaction. Organizations with cultures that enable and encourage empowerment have higher nurse retention rates (Larrabee et al., 2003; Laschinger, Shamian, & Thomson, 2001; Manojlovich & Laschinger, 2007; Sarmiento, Laschinger, & Iwasiw, 2004). In a study examining job burnout and empowerment experiences among nurse educators, job satisfaction was related to higher levels of empowerment and lower incidence of burnout; however, empowerment was the stronger predictor (Sarmiento et al., 2004). Others have found that attributes such as transformational leadership and collaborative practice influence job satisfaction through the mediating influence of empowerment (Larrabee et al., 2003). This finding was further supported by another study that examined the relationship between Magnet Hospital attributes and job satisfaction. Strong nursing leadership with access to empowering organizational structures, participation in hospital affairs, adequate staffing and resources, collegial nurse/physician relations, and a nursing model of care all significantly influenced job satisfaction (Manojlovich & Laschinger, 2007).

Travel Nurses

Little has been published regarding job dissatisfaction and burnout in travel nurses. A recent study in Taiwan focused on temporary nurses and found that these nurses showed lower levels of commitment to the organization than did permanent nurses. The authors postulated that this was because temporary staff had not assimilated the goals and values of the organization due to the uncertain nature of their tenure there (Yeh, Ko, Chang, & Chen, 2007). Other authors discussed the relationship between commitment and satisfaction - that greater commitment to the organization is related to

improved satisfaction and lower levels of burnout (Stordeur & D'Hoore, 2007). Another

study suggested that temporary nurses have lower expectations of their employers than

permanent nurses. Because expectations are lower, they are more often met by the

employers, resulting in higher levels of job satisfaction among temporary nurses.

Alternatively, permanent nurses' higher expectations were often not met, producing

disappointment and lower job satisfaction (Van Dyne & Ang, 1998).

There is a sizable gap in the literature regarding travel and temporary nurses.

Research is needed to better understand the motivations of travel nurses and their

commitment to the job and to the nursing profession.

Methods

An online survey was sent to 4,297 travel nurses employed by a large healthcare

staffing company in March 2009. The sample size was reduced by 34 e-mails that were

undeliverable, leaving a total sample of 4,263 travel nurses. Two reminders were sent via

e-mail at two-week intervals after the initial survey. Subjects were informed of the

possible risks associated with participation and agreed to participate after electronically

signing a detailed informed consent document. A total of 1,231 nurses returned surveys

for a 28.9% return rate. Prior to data analysis, 76 surveys received from nurses working

in non-acute care settings were excluded. Of the remaining 1,154 travel nurses employed

in acute care hospitals across the country, 38.2% were working at facilities that had

achieved or were on the journey to Magnet designation.

The online survey combined a 19-item instrument to measure burnout and 40

additional questions designed to elicit information about the organization, unit

characteristics, and demographic information. The independent variables were nurse's

age, gender, race, marital status, highest level of nursing education, hourly salary, specialty of the unit where the nurse was working, and nurse-assessed quality of care. Nurse-assessed quality of care was an interval scale variable measured by the response to "on the last shift you worked, was the quality of patient care on the unit (a) below the standard of care, (b) adequate, (c) above the standard of care". In addition, the following hospital attributes were used as independent variables: magnet status, number of patients assigned on a shift, location (state), and type of facility (i.e., non-profit hospital, academic medical center). Magnet status was an interval scale variable determined by whether the hospital was not a Magnet facility, was on the journey to Magnet status, or had already achieved the designation.

The Copenhagen Burnout Inventory (CBI) was used to measure burnout. This instrument was selected because it measures three distinct dimensions of burnout: personal burnout, work-related burnout, and patient-related burnout. Other burnout instruments do not have the specificity to separate work burnout from personal or patient-related burnout and are much longer than the CBI. Burnout scores during instrument development resulted in mean scores of 35.9 for personal burnout, 33.0 for work-related burnout and 30.9 for client (patient)-related burnout. The CBI demonstrated high internal reliability in all three sub-dimensions ($\alpha=0.87$ for personal burnout, $\alpha=0.87$ for work-related burnout and $\alpha=0.85$ for patient-related burnout) (Kristensen, Borritz, Villadsen, & Christensen, 2005). Scoring was achieved by assigning the following values to the responses: 100 to always, 75 to often, 50 to sometimes, 25 to seldom and 0 to never/almost never. Scores were averaged for each sub-dimension, with a score greater than 50 indicative of a high degree of burnout.

Each variable was evaluated for missing values, and outliers. Missing values in the CBI sub-dimensions were less than 1% of the total cases and in no case were 50% or more of the values missing. The missing values were replaced with the mean of the case responses for that sub-dimension. This methodology was recommended by the inventory authors because it provides a good approximation of the true value given the relationship among the scale items (Kristensen et al., 2005).

The dependent variables under study were burnout, job satisfaction, and intent to leave a travel nurse position. Job satisfaction was determined by the response to the single item, "overall, I am satisfied with my current job". Intent to leave was evaluated using the combined responses to 3 items: (a) "I would prefer another nursing job to the one I have now," (b) "If I have my way, I will not be working in this job (travel nursing) a year from now," and (c) "I have thought seriously about leaving this job (travel nursing)" (Tsui & O'Reilly, 1989). All of the questions were rated on a 5-point Likert-type scale; from strongly disagree to strongly agree.

Descriptive statistical analyses were run on all the variables. Bivariate correlation analyses were used to determine the relationships between the independent variables and the dependent variables. Analyses were run separately to consider the effects of the independent variables on each of the outcome variables. Chi-square tests and t-tests were used to determine significant differences between two groups of travel nurses; those that exhibited high work-related burnout (a score of 50 or greater) and those with low work-related burnout (a score of less than 50). Ordinary least squares regression analyses were run to examine the influence of the various independent variables on job satisfaction, intent to leave, and the three dimensions of burnout.

Results

The data were analyzed using the PASW (formerly SPSS) 17.0 program.

Descriptive statistics were run for all the variables. According to the U.S. Department of

Health and Human Services (2006) RN Sample Survey of 2004, the average age of all

U.S. hospital-based nurses was 43.4 years, 8% were male, 71% were married, and 39%

held baccalaureate degrees. In contrast, the travel nurses in this study were younger, more

often male, less likely to be married, and more likely to hold a baccalaureate degree

(Table 1). In addition, half of travel nurses claimed critical care as their nursing

specialty.

Burnout Results

The Copenhagen Burnout Inventory demonstrated adequate reliability in this

sample (α = 0.905 for personal burnout, α = 0.872 for work-related burnout, and α =

0.893 for patient-related burnout). Mean scores for each scale were well beneath the

threshold indicative of burnout - a score greater than 50, (m = 35.99 for personal burnout,

m = 39.65 for work-related burnout, m = 26.04 for patient-related burnout) with patient-

related burnout having the lowest score. Thirty-eight percent of travel nurses exhibited

high levels of personal burnout, 31% had high levels of work-related burnout, and 15%

showed high levels of patient-related burnout (CBI score of 50 or greater).

Chi square analysis was used to explore the differences between travel nurses

with high work-related burnout levels and those with low work-related burnout levels.

Travel nurses with low work-related burnout levels were more likely to be older, married,

have children in the home, and hold a diploma in nursing and less likely to hold a

baccalaureate degree than their travel nurse colleagues experiencing high levels of work-

related burnout. All of these differences were statistically significant (Table 2). No

statistically significant differences were noted between the groups with respect to gender,

race, foreign education, hourly salary, or type of unit.

Correlation Results

Correlations between the dependent variables of job satisfaction, intent to leave,

and burnout, and the various independent variables are reported in Table 3. Years as a

nurse and age were both significantly negatively correlated with all three burnout scales

($p<.01$). Education was significantly positively correlated with all three burnout scales

and negatively correlated with job satisfaction. Nurses with higher education exhibited

higher levels of burnout and less satisfaction with the job.

Independent variables used as proxies for quality of the work environment were

nurse-assessed quality of care, magnet status, and number of patients assigned on a shift.

When travel nurses believed that the quality of care on the unit was better, they were

significantly more likely to have lower work-related and patient-related burnout scores.

In addition higher patient loads were significantly related to a lower assessment of quality

care and higher levels of work-related burnout. Travel nurses who reported lower patient

loads and better quality of care were less burned out than those who reported inadequate

staffing and poorer quality of care. Finally, travel nurses working at hospitals with

Magnet designation were more likely to perceive higher quality of care and have higher

levels of job satisfaction. No significant relationships were found between Magnet

designation and burnout in the travel nurses studied.

Regression Results

Multiple least squares regressions were run to examine the influence of several independent variables on the dependent variables, work-related burnout, job satisfaction and intent to leave. Results are reported in Table 3. Work-related burnout was significantly influenced by age, number of patients and facility location outside of California, $R^2 = .0998$, $F(29, 939) = 4.02$, $p < .01$. The burnout score decreased by .46 for each additional year of age, and increased .79 for each additional patient assigned during the shift. Magnet hospital designation was the only significant predictor of job satisfaction, $R^2 = .0327$, $F(29, 939) = 1.16$, $p < .01$. Job satisfaction improved by nearly 25% when the hospital held Magnet designation. Only age had a significant influence on intent to leave, $R^2 = .05$, $F(29, 927) = 1.85$, $p < .01$. As age increased by one year, intent to leave decreased slightly.

Hypothesis Testing

The first hypothesis was supported by the findings. Age, marital status, having children in the home, and education all exhibited significant differences between travel nurses with high levels of work-related burnout and those with low levels of work-related burnout. Findings related to the second hypothesis were equivocal. The organizational attribute represented by the number of patients assigned during a shift showed a stronger influence on burnout than did age, a nurse attribute. The data established that Magnet status was a significant predictor of job satisfaction, thereby supporting the third hypothesis. Yet, Magnet status, alone was not a significant influence on either burnout or intent to leave.

Discussion

This study revealed important information that contributes to the literature on job satisfaction and burnout among travel nurses. Travel nurses in this study exhibited moderate levels of burnout with the highest burnout related to the work itself. These burnout results support prior findings related to the challenges faced by hospital-employed nurses. Travel nursing has been viewed as a means to get away from difficult work environments that contribute to job dissatisfaction and burnout. Because the sample does not include permanently-employed hospital nurses, no comparative conclusions can be drawn as to which group is more dissatisfied or more burned out.

As nurses age, they are more satisfied in their jobs and exhibit less burnout. For many nurses, age brings changes in the type of work that one is doing. As they age, nurses move into jobs that are out of the direct inpatient care environment. Travel nurses, however, predominately remain at the bedside. Yet, older travel nurses also exhibited higher job satisfaction levels. Travel nurses, in general, are younger and more likely to hold baccalaureate degrees in nursing than their counterparts that are not travel nurses. Higher education may produce higher expectations of the job, putting more pressure on hospital nursing leaders to deliver on those expectations. Unmet expectations then produce higher dissatisfaction in baccalaureate prepared and younger travel nurses.

Intent to leave may be influenced by specific perceptions about career length and mobility. For example, older nurses are less likely to indicate an intent to leave their jobs, perhaps because they are unsure of the duration of the rest of their career and hesitate to undertake the stress involved in job changes. In addition, nurses with associate degrees were less likely to leave their positions than nurses with baccalaureate degrees. More

highly educated nurses may believe they have more employment opportunities available to them and therefore feel less compelled to stay in a particular job, especially if they are unhappy.

Magnet designation as a proxy for an improved work environment for nurses was, not surprisingly, related to higher levels of job satisfaction in travel nurses. In this study, a Magnet hospital environment was not responsible for improved retention, indicated by a non-significant finding regarding intent to leave for travel nurses employed at Magnet hospitals. The intent to leave item was articulated clearly to refer to the nurses' intent to leave travel nursing as opposed to their intent to leave the particular work assignment. Therefore, the non-significant finding for intent to leave in this study can not be interpreted as a direct relationship between Magnet hospital status and retention. Finally, Magnet status significantly positively influenced nurse-assessed quality of care indicating a strong relationship between the work environments created by Magnet status and the ability of nursing staff to deliver quality patient care, thus increasing satisfaction.

This study was limited by the fact that the sample was from a single healthcare staffing company and employed a convenience sample of nurses. In addition, the use of an online survey could have influenced the results by unintentionally excluding nurses that did not have online access. The non-response rate of almost 70% could have influenced the outcomes if non-responders were significantly different from responders.

This study is the first that has generated knowledge regarding Magnet hospitals of this breadth using a large, nationally-distributed sample of hospitals. It supports previous literature that documents work environment challenges and their contributions to nurse job satisfaction and burnout. These results suggest that more hospitals should seek

Magnet designation as a means of improving the job satisfaction of the nursing workforce. It also suggests that more research is needed in this area in order to adequately explain the reasons for job satisfaction and burnout of nurses and, perhaps more importantly, how best to achieve higher levels of satisfaction and lower levels of burnout. Comparative studies between various employment types among nurses can improve understanding of the dynamics of employment relationships and satisfaction among nurses.

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Table 1

Comparison of the Characteristics of Travel Nurses with Nurses Represented by the National Sample Survey of Registered Nurses

Characteristic	Travel nurses (N=1230)	RN Sample Survey
Mean age	38.3	43.4**
Gender		
Female	90%	92%**
Male	10%	8%**
Marital status		
Married	32%	71%**
Single	50%	12%**
Divorced/widowed	18%	17%
Children		
No children in home	83%	49%**
Children in home	17%	51%**
Race/ethnicity		
White	82%	87%**
Non-white	18%	13%**
Nursing degree		
Diploma	8%	14%**
Associate degree	38%	39%
Baccalaureate degree	51%	39%**
Graduate degree	3%	9%**
Foreign trained	10%	4%**
Mean hourly salary	$31.45	$28.56
Unit specialty		
Adult critical care	50%	n/a
Perioperative	13%	n/a
Pediatrics & neonatal	11%	n/a
Maternity	10%	n/a
Adult general	16%	n/a

**χ^2 significant at p<0.01

Table 2

Comparison of Characteristics of Travel Nurses with High Work-related Burnout and Travel Nurses with Low Work-related Burnout

Characteristic	High work-related burnout (n=356)	Low work-related burnout (n=778)
Mean age	35.7	39.5**
Gender		
Female	91%	89%
Male	9%	11%
Marital status		
Married	27%	34%*
Single	57%	46%**
Divorced/widowed	16%	20%
Children		
No children in home	87%	81%*
Children in home	13%	19%*
Race/ethnicity		
White	83%	81%
Non-white	17%	19%
Nursing degree		
Diploma	5%	9%*
Associate degree	35%	39%
Baccalaureate degree	57%	49%**
Graduate degree	2%	4%
Foreign trained	9%	11%
Mean hourly salary	$31.49	$31.44
Specialty of unit		
Adult critical care	51%	48%
Perioperative	10%	14%
Pediatrics & neonatal	11%	11%
Maternity	10%	10%
Adult general	21%	17%

* χ^2 significant at p<0.05
** χ^2 significant at p<0.01

Table 3

Regression Analyses: Independent Variables on Work-related Burnout, Job Satisfaction, and Intent to Leave

Variable	Work-related burnout			Job Satisfaction			Intent to leave		
	β coeff.	Std err	t	β coeff.	Std err	t	β coeff.	Std err	t
Age	-.46**	.10	-4.69	.01	.01	1.58	-.01*	.01	-2.21
Male	-1.90	2.26	-0.84	.13	.12	1.07	-.14	.11	-1.23
Nonwhite race	-2.38	1.77	-1.34	-.00	.11	-.04	.06	.10	0.65
Married	.65	1.59	0.41	.06	.10	.56	.04	.09	0.47
Children in home	-3.03	1.69	-1.79	.11	.11	.99	-.12	.10	-1.15
Diploma	-.93	2.68	-0.35	.14	.16	.85	-.02	.14	-0.14
Associate degree	-1.86	1.45	-1.28	.02	.09	.18	-.12	.08	-1.43
Graduate degree	-4.31	3.97	-1.08	-.08	.23	-.36	-.17	.25	-0.66
Foreign trained	-2.84	2.39	-1.19	-.03	.15	-.17	.03	.14	0.21
Yrs of exp as RN	.11	-12	0.90	-.00	.01	-.58	-.00	.01	-0.14
Yrs of exp as traveler	.13	.23	0.57	-.00	.01	-.21	-.01	.01	-0.53
Number of pts per shift	.79**	.30	2.59	-.04	.02	-1.86	.00	.02	0.13
Critical care	2.68	1.69	1.59	-.16	.10	-1.66	-.08	.10	-0.01
Perioperative	-2.44	2.27	-1.08	-.10	.14	-.71	-.07	.14	-0.50
Pediatric	-2.48	2.37	-1.05	-.04	.15	-.27	.17	.14	1.25
Maternal	2.90	2.49	1.16	-.04	.16	-.29	-04	.14	-0.29
Other specialty	1.69	3.62	0.47	-.25	.32	-.78	.32	.33	0.97
Magnet	1.26	1.26	1.00	.22**	.08	2.69	-.04	.08	-0.651
Facility not in California	-3.79**	1.46	-2.60	.05	.09	.52	.07	.09	0.82
Constant	62.11	7.54	8.24	3.39	.50	6.74	3.76	.44	8.61

*p<.05, **p<.01

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A Qualitative Analysis of the Attitudes and Motivations of Travel Nurses

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Abstract

Purpose: The study explored a segment of the nursing population that has not been previously studied through an examination of the experiences and perceptions of travel nurses.

Design: The study used an ethnographic design with content analysis as the approach to analyzing the data. It was part of a larger mixed methods study conducted in the spring of 2009.

Methods: Telephone interviews were conducted on travel nurses who volunteered to be interviewed. A total of 17 travel nurses were interviewed.

Findings: Travel nurses expressed a desire to learn more, gain different experience in practice and with different people and cultures as their primary motivators for becoming a travel nurse. They also indicated that travel nursing improved them as a person and as a nurse by teaching them flexibility, self-confidence and a variety of skills and procedures. Conclusions: A diversity of nursing experience may contribute to improving nursing skills, flexibility, and tolerance of others more so than nursing experiences that are limited to a single or even a very few different work experiences. Travel nursing is a mechanism for nurses unhappy in a job, to experience a variety of employers in order to more carefully select an employer that will be a good match.

Introduction

Little is known about the motivations of travel nurses. In fact, the literature that explores travel nursing does not exist. From a hospital administrator's perspective any form of external supplemental staffing is often looked upon as an unnecessary expense. From a nurse leader's perspective utilization of supplemental staffing is not only necessary but in certain circumstances can be part of a strategic staffing plan. Since utilization of travel nurses is a common practice, it is important to understand why nurses choose to become travel nurses, what they perceive they gain from their experiences, and perhaps how hospitals might receive more value from the use of travel nurses.

In recent years more nurses have become attracted to travel nursing. Rather than ignore this trend with the hope that a hospital will be successful in eliminating the use of travel nurses, it is pragmatic to learn as much as possible about this style of nurse temporary employment.

The purpose of this study was to explore the attitudes and motivations of travel nurses and to elucidate some of the experiences that nurses have as "travelers". A qualitative approach was used in the research because of its exploratory nature and the dearth of literature on the topic. A clear opportunity existed to describe travel nurses for the first time using the richness of analysis that qualitative methods can generate.

The specific aims of the study were to (a) describe what factors motivate nurses to become travel nurses, (b) explore particular challenges faced by travel nurses and (3) gain a broader understanding of the experiences nurses have as travel nurses.

Review of the Literature

There are no published academic research reports on the topic of travel nurses; a form of temporary nursing found only in the United States. Two research reports were found in the CINAHL database when the search was extended to include the broader category of temporary nurses. Upon expanding the search beyond "nursing", the "United States" and the word "temporary" more published works were discovered, though nothing specific to travel nurses.

Reports from European and Asian countries dominate the literature on contingent workers (De Cuyper & De Witte, 2007; Jalonen, Virtanen, Vahtera, Elovainio, & Kivimaki, 2006; Van Dyne & Ang, 1998; Yeh, Ko, Chang, & Chen, 2007), especially those reports related to healthcare. In the United States, between 1.8% and 4.1% of total employment is occupied by contingent workers. This volume has been relatively stable since 1995, when it was first measured (Bureau of Labor Statistics, 2005). Travel nurses occupy a small segment of the hospital workforce, accounting for roughly 18,000 nurses in 2007 (Osborne, Calvi, & Hessinger, 2007). In California, 1.2% of nurses work as travel nurses (California Board of Registered Nursing, 2008).

In comparison, the rate of contingent employment in European countries is much higher and continues to grow. While it varies by country, the rate of employment of contingent workers is between 4% and 33% with an average in double digits (OECD, 2002). Given the differences in volume of contingent workers in the United States and Europe, it is understandable that most reports about contingent workers originate from Europe.

Typical reasons that workers chose contingent over permanent employment were; flexibility, to keep current in their skills, and dissatisfaction with their current job - usually politics in the workplace (Rassuli, 2005). Temporary work for nurses that can be mobile, offers a nurse opportunities to experiment with various jobs as a means of finding the best fit (Goodman-Bacon & Ono, 2007). Temporary nurses were younger, more often single and more likely without children in comparison to nurses in permanent positions (Goodman-Bacon & Ono, 2007; Yeh et al., 2007).

Surprising results were reported when researchers examined contingent workers' attitudes about their work and their employers. These results have clear implications for employers that use contingent workers in terms of providing motivation to achieve top performance. Contingent worker perceptions were influenced by comparisons between the many employers for which they worked, while permanent workers had limited comparison points (Allan & Sienko, 1998). For travel nurses, who may work at dozens of hospital facilities over their tenure as a traveler these workplace evaluations could be quite extensive. Temporary workers that had higher satisfaction with their assignment and those that voluntarily chose temporary work exhibited higher levels of performance than those who were dissatisfied or those that chose to work temporarily because other options were more distasteful (Ellington, Gruys, & Sackett, 1998).

Some research findings conflict. As an example, a Belgian study found that the relationship between job insecurity and both job satisfaction and organizational commitment was more negative for permanent employees than for temporary ones (De Cuyper & De Witte, 2007). Yet, others describe temporary employees (nurses

specifically) as having more job stress and less organizational and occupational commitment than permanent employees (Yeh et al., 2007).

The psychological contracts that temporary employees had were different than those of permanent employees. Temporary employees didn't have an expectation of job security (in their psychological contract with their employer) so when this contract was broken and the job ended, it didn't have a negative effect on them as it would have on a permanent employee who had an expectation of job security (De Cuyper & De Witte, 2007). This concept was discussed in much more detail in organizational commitment-related research specifically examining permanent employees where several theories were proposed to explain varying levels of commitment.

The Theory of Work Adjustment (TWA) informed this study. TWA proposes that work environments and workers interact with each other, and that successful work relations are the result of continuous adjustments made by both parties in order to create a balanced state of communication. Job satisfaction is the result of the degree to which an individual's job requirements are met by the work environment (Bretz & Judge, 1994). The fit between the person and the environment becomes evident in the tenure of the worker. Individuals will leave sooner if the fit with the environment is not good. Not only is tenure a factor, but indeed, "person-organization fit" results in both higher levels of satisfaction, but also in more career success (Bretz & Judge, 1994). Travel nurses are often the result of a non-fit (prior to becoming a travel nurse) and therefore may reveal valuable information related to the concept of person-environment fit.

Methods

This study was an ethnographic design using content analysis as the approach to examining the data. It was part of a larger, mixed methods study conducted in the spring of 2009 (Faller, 2010).

Sample

A sample of 68 nurses was solicited from an e-mail requesting voluntary participation in telephone interviews to further discuss their experiences as a travel nurse. The initial e-mail inquiry was sent to 4,263 travel nurses working on March 9, 2009 for a large national healthcare staffing organization. Through an e-mail invitation process that explained the potential risks of participation, the final sample consisted of 17 travel nurses who volunteered to participate in the interview. All of the travel nurses were currently working or had recently worked as a travel nurse in a hospital inpatient setting.

Data Collection and Analysis

An interview guide was developed to allow some consistency in the content and progress of the interviews, however, the guide was not followed rigidly. Rather, it was used as a tool to start conversations. The content of the guide was framed from the researchers areas of interest and an open-ended survey question that queried for additional important information the respondents wished to share. The open-ended responses received from the original e-mail survey were coded into six distinct areas that were included in the interview guide. Further inquiry and probes were used during the interviews, based on the responses received and the direction of the specific interview. Seventeen interviews of hospital-employed travel nurses were conducted (of which one nurse did not desire to be tape-recorded). The recorded interviews were transcribed

verbatim and extensive interviewer notes were documented for the single interview that was not recorded.

The interview transcripts were coded during a reading and re-reading process. The constant comparative method (Corbin & Strauss, 2008) was used and ultimately 146 total codes were consolidated into 6 final categories. These categories were: why travel, I'm there to help, part of the unit or not, it's only 13 weeks, treat me well and I may stay, and the rewards of travel nursing.

Findings

Demographic information was collected at the beginning of each interview. Of the 17 nurses interviewed: three were male, more than half held a baccalaureate degree in nursing or higher (53%), and the majority were Caucasian (72%). On average the travel nurses had 9.4 years of RN experience and 4.8 years of experience as a travel nurse, and the respondent's average age was 37.7. Twenty-three percent were working at a Magnet designated hospital or one that was "on the journey" to Magnet designation. Table 1 reports the results of the demographics of the informants and compares them to the nurses that participated in the original on-line survey and the nurse demographics of the 2004 RN Sample Survey (United States Department of Health and Human Services, 2006).

The perceptions of travel nurses held by hospital-employed nurse leaders and staff often occupy the full continuum from uncommitted, money-hungry, troublemakers to exceptionally flexible, highly skilled, and caring nurses. At times, staff nurses express resentment directly to travel nurses if they perceive a difference in pay and benefits, when in fact, that difference can be minimal or non-existent when considering total

compensation. One travel nurse described her response when confronted with an ambivalent welcome related to some of these perceptions:

> "Most of the time they just communicated anger in that they felt that we were over paid. The way that I have learned to communicate better with the staff is that if you are a hospital employee, there's PTO time, if you get sick there is coverage for that, there is paid time off for vacation or whatever. A travel nurse has none of that. Not only do I not get paid if I am sick, there is just no vacation time. It's the same amount of funds, it's just allocated differently and that is pretty much how I address anybody that became hostile to me."

Why Travel

Of critical interest in this study was discovering the reason nurses decided to become travel nurses. The logistics of travel nursing alone indicate that it is not easy. Travel nursing involves moving self and belongings to another location every 3 months, as well as embracing the added stress of a new job and a new city. Some travel nurses highlighted these difficulties with the reminder that they are finding a new doctor, new hairdresser, new grocery store, and new gym with every assignment in a different location. Income taxes must be filed in all states in which travel nurses were employed. All of these were challenges that were undertaken frequently as a travel nurse. Why does a nurse opt to take on this lifestyle?

The literature reports dissatisfaction with current job and a need for flexibility as the primary reasons people choose to work in temporary jobs. Both reasons were found to be important determinants in the decision to take up travel nursing. But surprisingly two other reasons surfaced: the desire to get more experience at different hospitals and the wish to see the country. Nurses often indicated an aspiration to experience more than what was offered at their current location of employment. In addition, several nurses talked about dissatisfaction with their current place of work, but often the expressed

dissatisfaction was coupled with a desire to experience other places and find a better place to work.

> "I was very unhappy at my staff hospital so I wanted to see what better units there were out there."

> "I wanted to travel and see the United States and I felt that it was easier to do that as a travel nurse since I would be at a place for longer, also because I wanted to get experience in different hospitals as well as see how different hospitals responded or reacted to different situations."

> "I needed to branch out from my current situation. There just wasn't a lot going on. I felt like I needed to experience a little bit more."

> "I travel to see the country and get to know new people and cultures."

Much of the discussion related to a desire to learn: get exposure to new procedures and different ways of doing things, gain knowledge of other people and cultures, and experience how other hospital organizations were managed.

I'm There to Help

Commonly travel nurses talked about the reason a particular hospital was using travelers. The nurses knew that the hospital was short-staffed, that they were in need of nurses and that they saw their primary role as helping out in the current situation (whatever that might be). The travel nurses recognized that they would not get the best schedule and often might float more than regular staff....but that was OK, because they knew there was a reason for them being there and that reason was "to help".

> "They don't have to like me. I'm there to help them."

> "I know why I'm there. I'm there because they're short-handed and they need my help."

> "I know that they need me because there is a shortage somewhere."

Part of the Unit or Not

Travel nurses described their assignments and experiences in detail. At some facilities they were treated well and felt a part of the unit. At others they were treated very poorly. Their treatment impacted their feelings of acceptance as part of the healthcare team, though most seemed to express a peculiar sort of understanding or empathy regarding their treatment, especially when it was poor.

> "Every assignment was different. Some made it very very easy and some the staff was very hostile. So it kind of depended on the facility itself."

> "The facility we are currently at has just posted notes on their lockers that said that only full time staff can have lockers and everyone else was to immediately remove all of their belongings, which made us feel a little put out. We are there to help and be part of the team and when they make that distinction between us it also hinders their staff from building a team feeling. It causes maybe not animosity but some separation. So then it's like them and us."

The facilities at which travel nurses had positive experiences incorporated the following concepts into their use of travel nurses: including travel nurses in unit social functions, conducting an appropriate orientation (duration and content), asking opinions of the travel nurse on unit matters, including them in recognition during nurses' week, incorporating a welcoming attitude, pairing travel nurses with a consistent buddy (for resource purposes), giving the travel nurses a hospital e-mail address, assigning a manageable schedule, including travelers in "unit in-services" and continuing education, and nursing leaders taking time to introduce themselves to the new travel nurses.

> "There were two facilities they would talk to me as if I was working there, and I just kind of fit in really well."

> "When I go to a contract you know, I feel like this is my job. I am proud to be working here because it is my facility, too, but I am technically still contracted. So it's nice to see that they still accept me as well."

When travel nurses had bad experiences at an assignment, they described some serious problems and issues: lack of management support, unorganized scheduling, lack of equity in patient assignments, and not having access to information and resources to the same extent as permanent nurses. The travel nurses had an uncanny ability to understand that how they were treated may indeed be indicative of other management issues that have an impact on a hospital's ability to attract and retain its nurses.

> "Sometimes the management at the facilities where we have been has been less than desirable which might have been the cause for them not having much staff."

In many cases the travelers even felt unwanted.

> "The facility treats us kind of like dirt, like second-class citizens."

> "A lot of places think that you are just a warm body and you are an agency so you have to do whatever they want and just float every 4 hours or continually giving you the worst patient assignment."

> "It was a very large ER and they had different pods, and they had one pod that was always staffed by agency and so we were kind of in the back of the ER and left to our own and it was just agency nurses back there. So, they made you feel a bit isolated."

> "You hear stories about the doctors getting travel nurses fired, just because they don't like what we do."

Often the descriptions of unequal treatment included statements of relief related to the short duration of the assignment. The travel nurses could make it through the assignment because "it's only 13 weeks".

It's Only 13 Weeks

Travel nurses searching for the job that would make them want to settle down and stay, were often faced with an assignment that they knew very early was not a good fit. There was no mention of leaving these assignments prior to the committed contract.

Rather the travel nurses expressed the idea that they could manage anything for 13 weeks.

> "It was a unit where we were staffed almost entirely by travelers. There were just so many times where we came up with a situation where we were like what do we do now? And there were just a bunch of other people with the same experience as you, coming from the same place and you just don't know. We couldn't get anyone to give us a straight answer. And we didn't know where to go look for it. I started my count down, basically my second week of how many shifts I had left."

> "Really, I just love traveling. You don't get involved in any of the politics and if you're unhappy you're done in 13 weeks."

Treat Me Right and I Might Stay

One reason that nurses decided to travel was to find the ideal job. They weren't satisfied with their permanent job in a hospital and decided that reaching out to the diversity of opportunities available through travel nursing might afford them the ability to find the job that was the best fit for them. Moving from job to job to find the best personal and professional fit was also a common theme in the contingent worker literature.

> "I was very unhappy at my staff hospital so I wanted to see what better units there were out there."

> "I just didn't like the management style and the way the unit was run, so I kind of left to see what else was out there."

> "I guess the main reason I left was that I was frustrated with being staffed at a facility."

> "I guess being on committees that have a lot of nurses on them and a lot of good ideas but nothing ever comes from it because change comes from the top down. Healthcare is a business and I just got extremely frustrated with trying to make changes with every other nurse and nothing ever gets done."

When hospital staff and leadership treated the travel nurses well, it was more likely that they felt like this might be a place that they could stay. They talked about feeling a part of the team and being treated as equal to the permanent staff. Often it was apparent to the travel nurses that the hospital was looking to recruit them to stay permanently and this affected how they were treated in a positive way.

> "I am looking for the ideal place to work and traveling lets me try out different facilities."

> "The facilities that I work at the thing that makes me want to stay are good teamwork, friendly staff, fun doctors, and flexibility in scheduling."

> "They're hoping that you'll sign on so you get pretty much the same treatment as everyone else."

> "They do kind of treat me more like a long term prospect; as somebody they would like to keep on."

The Rewards of Travel Nursing

The travel nurses consistently expressed the belief that they have grown as persons and as nurses because of their experiences as a travel nurse. Most commonly they described how their experiences as travelers resulted in increased self-confidence, improved technical skills and the ability to manage successfully in any situation, no matter how challenging. From a personal aspect, travel nurses reported increased flexibility and improved tolerance of others, as well as learning from the exposure to so many different cultures. When asked how travel nursing had affected them as a nurse, many of the travel nurses described an improvement in self-confidence.

> "As a nurse it has definitely strengthened my ability to be very flexible and you learn, every place is so different, so you learn something new everywhere you go. And so it has definitely just strengthened my skills just as a nurse, being able to just walk into something and just go with it. And personally, it's given me a lot of confidence because you become much more sure of your abilities. It gives you a lot of self confidence."

"I have been all over the country so it has just really kind of opened my
eyes to different cultures and you know different ways of life."

"It has made me a lot more confident in my skills. And it has made me
more confident in selling myself in an interview."

"I feel I can just kind of walk into anywhere and within a couple of hours
feel comfortable with the patients, with the nurses, and with the doctors."

"It has made me more independent, more self confident, more willing to
accept change and take chances."

"The rewards are that you get to know yourself better as a person and as a
nurse. You get to continually grow. Your self-confidence grows and your
thirst for adventure grows. I'm just fearless now."

Similarly, the travel nurses spoke of becoming a better nurse as a result of their varied

travel experiences.

"I have had a real exchange of ideas at every place I go. I think that it has
really made me a more well-rounded nurse."

"It has made me a better nurse by exposing me to different ways of doing
things, new equipment and new procedures."

"It broadens your area of practice and it makes you get up there and learn
more, just by seeing different things. Maybe it challenges you to ask
questions that you would never have thought to ask because you're used to
the same thing all the time at that consistent hospital."

"Travel nursing gives me that opportunity to challenge myself and not to
be comfortable in any specific setting and to really broaden my scope of
practice and learn new things and how people do things in different places,
and just the wide scope of experience that I have gotten doing traveling. I
guess that it has made me a better nurse overall."

The idea that travel nursing makes one a better nurse is interesting and deserves further

exploration. The general theme of the interviews in this study tended to give credit to the

variety of different experiences adding dimensions to one's nursing capabilities. The

travel nurses believed that they would not have experienced such growth staying in a

single or perhaps a few hospitals, rather the numerous settings in different regions exposed them to experiences that just couldn't be had in a permanent role. One nurse summed it up in this way:

"It [travel nursing] is one of the best decisions I've made."

Discussion

The literature speaks to the motivations of temporary workers regarding a desire to move around in order to experience a variety of roles before settling in on the job that fits them best. Travel nurses echoed these motivations. Many believed that something was missing in their current job causing them to seek a way to fill the gap. Travel nursing was viewed as a method to fill the void. Experiencing nursing work at many different facilities gave travel nurses more self-confidence then they had before traveling. Through their work with a wide variety of people and cultures they expressed an improvement in their patience and tolerance of others – not just as individuals, but culturally as well.

Most importantly, though, travel nurses believed that through their experiences they not only developed personally, but improved as a nurse to an extent that may not have occurred had they not made the decision to travel. Most of this incremental improvement was attributed to developing skills with procedures, equipment, and different ways of doing things that are just not available when one stays in a single location.

Travel nurses left a place of permanent employment because the position or organization was not a good fit for them. A part of their motivation to travel was to find a better fit. Yet, beyond this, travel nurses found that broadening their experiences gave

them much more than the best possible fit with an employer. It gave them knowledge that helped them develop into a better nurse.

Conclusions

Travel nursing is not like any other form of hospital staff nursing. It requires skills and attributes that are not necessarily present in every nurse. Through a multitude of travel assignments, nurses gain experience and knowledge. Often nurses realize both personal and professional rewards. Learning different ways of doing things, different organizational and management styles and experiencing a wide variety of cultures are all experiences that contribute to a nurse's concept of themselves.

> "I would say that you need to know yourself. Know your limitations. You have to be really confident in that you know your skills because it is not a place where you want to go and learn nursing. You have to be a confident nurse and know your stuff. You have to hit the floor running. No one is there to teach you nursing because they are so sure that they have in their head that you are experienced and you know it. So you have to be confident, you have to be open minded, because you will see some really bizarre things that you have never seen and you have to be accepting of people and be honest. If you are not the type that can ask for help then think about it. And you have to have a passion. "

For those nurses that determine travel nursing may be right for them, no matter the reason; they should fully expect to find themselves a better nurse having had the experience. This is the beginning of a theory that deserves further examination. Nurses grow and improve as nurses through a wide variety of experiences that allows them to view the world, their work and their patients differently.

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Table 1

Comparison of Demographics of Nurses

	Nurses interviewed N = 17	On-line survey nurses N=1,230	2004 RN Sample Survey
Age	35.72	38.3	43.4
Male	18%	10%	8%
Caucasian	72%	82%	87%
Baccalaureate degree	53%	51%	39%