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A Measurement Of Job Satisfaction Indicators Of North Dakota Long Term Health Care Givers

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A MEASUREMENT OF JOB SATISFACTION INDICATORS OF NORTH DAKOTA LONG TERM HEALTH CARE GIVERS

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This dissertation meets the standards for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota and is hereby approved.

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Signature Deborah Moreno

Date 11/8/02

TABLE OF CONTENTS

LIST OF TABLES

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ABSTRACT

Long term care facilities in North Dakota and across the nation are experiencing a shortage of Registered Nurses (RNs), Licensed Practical Nurses (LPNs), and Certified Nurse Assistants (CNAs). This shortage is significant as it directly affects the quality of care provided to long term care residents. As long term care is labor intensive, recruitment and retention efforts are critical to these facilities. In a highly competitive labor market, although recruitment is important, retention of current employees is crucial. An integration retention strategy is necessary for the retention of employees. Numerous studies have suggested that job satisfaction is directly related to retention.

The identification of indicators of job satisfaction has been the focus of many studies. Some research has focused on job satisfaction of long term care givers but several limitations of these studies stand out. First, these studies have focused on either RNs, LPNs, or CNAs. None have examined the differences between the groups. Second, it is difficult to replicate or generalize findings as regulations, reimbursement, socioeconomic, cultural differences, and demographics greatly vary across the nation and even state to state.

This study was a secondary analysis of data collected by the North Dakota Long Term Care Association and the North Dakota Department of Health and Human Services and involved 2,577 long term care givers throughout the state of North Dakota. The

purpose of the study was to identify indicators of job satisfaction, identification of indicators that were different among the three groups of care givers, and identify the significance of those differences. A previously developed and tested questionnaire was used to measure job satisfaction. Factor analysis was performed. Subsequently, reliability analysis was performed on the identified factors. One-way ANOVA was performed on the summated means of each factor to identify differences among the three groups. One-way ANOVA was also performed on the individual items to identify differences in the individual items.

Findings indicated that differences exist in indicators of job satisfaction among the RNs, LPNs, and CNAs and some of these differences are significant. These indicators and their significance are discussed.

CHAPTER I

INTRODUCTION

Long term care facilities in North Dakota, along with the nation, are experiencing a shortage of health care givers. This shortage is significant because staffing directly affects the well-being and quality of care of nursing home residents. Difficulty in obtaining and retaining the necessary staff places an enormous burden on long term care facilities, thereby making recruitment and retention crucial. Although the recruitment of health care givers is important, retention of current employees is equally important. The current and future nursing shortage has demanded effort be put into retention. To be successful, a long term care facility must take care of current employees through integrated retention strategies. In order to plan retention strategies, it is necessary to first identify those factors which contribute to (or discourage) employee retention. Numerous studies suggest job satisfaction is a predictor of retention and identify indicators and their significance associated with job satisfaction.

This shortage of health care givers has been attributed to several factors. The earlier discharge of hospitalized patients with higher acuity to long term care facilities results in the need for greater intensive care provision by long term care health care givers than in the past. The increased ability of medicine to manage chronic health conditions and diseases has contributed to longer life expectancies. The increased number of

persons living longer with chronic conditions results in an increased number of health care givers needed to manage their required care. The likely increased number of persons over the age of 65 as a result of the "Baby Boomer" generation becoming senior citizens will be a significant contributing factor to future shortages.

Researchers have found a decrease in interest in nursing as a career. This finding is reflected in the recent decline in enrollment of nursing programs. Researchers in recent surveys report a 5.5% drop in enrollment in baccalaureate nursing programs in the fall of 1998 and a drop of 4.6% in 1999 (Decker et al., 2000).

These factors combined with fewer individuals entering the health care fields, long term care will continue to experience a critical shortage of care givers who provide frontline care for the elderly. Frontline care givers are defined as: Registered Nurses (RNs), Licensed Practical Nurses (LPNs), and Certified Nurse Assistants (CNAs). The care these providers deliver is central to the process and to the outcomes of long term care.

The long term care industry is labor intensive, consequently, staffing concerns are always significant. It is estimated staffing constitutes 68% of a long term care facility's budget (Guillard, 2000). Understanding the implications of research as it relates to current and future staffing needs of long term care facilities is crucial.

In an attempt to assess the extent of the shortage of health care givers, the American Health Care Association surveyed 16,500 long term care facilities across the nation regarding their staffing situation. This survey revealed a shortage of 65,000 CNAs, 25,000 LPNs, and 16,200 RNs (Vacancies plague U.S. nursing homes; 2002).

The American Health Care Association RN Manpower Study, in a follow up survey, revealed 82% of the responding long term care facilities needed additional CNAs, 67% were in need of LPNs, and 71% needed RNs (Cohen-Mansfield, 1997). The U.S. Labor Force estimates the long term care labor force must grow nearly 70% over the next decade. A growth rate of only 1.2% annually has been projected by the U.S. Labor Force (Cohen-Mansfield, 1997). The projected demand for RNs in long term care facilities is estimated to increase 66.1% between 1991 and 2020 (Decker et al., 2000). The number of LPNs needed in long term care facilities is estimated to increase 71.5% for the same time period (Decker et al., 2000). Decker et al. estimated an increase of 69.1% in CNAs will be required between 1991 and 2020. These projections are based on current staffing patterns and do not take into account any proposed changes in nursing staff ratios (i.e., number or hours of staff to patients). Estimates of turnover and future workforce needs vary somewhat depending on the source. Attention by policymakers and consumers has focused on the staffing levels in long term care facilities. Many policymakers and consumers call for an increase in staffing levels. If circumstances do not change, there will not be a sufficient workforce available in the coming years to maintain the current staffing levels. The increase in demand and the shortage of persons entering the health care field, emphasize the need to focus on recruitment and retention. Although recruitment is often the primary focus, retention, particularly in a tight labor market, is vitally important. Retention of valued employees is essential to maintain high levels of quality service and efficiency in a tight and an increasingly competitive job market.

Staffing in the long term care setting faces a variety of problems. These problems include too few staff to provide adequate care, new employees whom the residents do not know very well, staff who have not received adequate training, and scheduling of staff. Turnover of staff is a critical problem in long term care facilities. High rates of turnover among long term care staff is well documented and the turnover rates of long term health care givers is staggering. It is estimated the annual turnover rates for RNs are between 28% and 59%. The turnover rates for LPNs are estimated to be between 27% and 61%. It is estimated that the turnover rates are between 88% and 143% for CNAs (Decker et al., 2000).

The anticipated length of stay on the job by long term care givers is extremely short, especially for newer employees. Estimates reveal over 90% of CNAs leave their job within ninety days of employment. In a study conducted by Noelker (2001), when new CNAs were asked if they wanted to be a CNA three years from now, 16% percent responded yes compared to 34% of the more experienced CNAs (Noelker, 2001).

These high turnover rates have psychological costs to both the residents and the staff. Working short staffed results in an increased workload and causes resentment among the remaining staff who must assume extra responsibility. This often affects staff performance and impacts the quality of care the residents receive. Numerous studies have demonstrated the relationship between staffing and the quality of care provided in long term care facilities (Hendrix & Foreman, 2001). Inadequate staffing negatively impacts the quality of care in a several ways. Staff, when working short, often omit time consuming care, such as brushing teeth, bathing, and toileting. Continuity of care and

personal relationships between caregivers and residents are important determinants of quality of care. The instability of the environment created by frequent staff changes may produce anxiety in the elderly who must rely on a shifting array of personnel to meet his/her basic needs. For residents who are cognitively impaired, constant changes in staff further aggravates disorientation.

Turnover of staff not only affects the residents and the remaining staff, it also creates a large financial burden to the long term care facility, which in probability, is already experiencing financial difficulties. It is estimated the cost to replace a RN in a long term care facility is approximately $7,000 for recruitment and training. The cost to replace a CNA is approximately $2,000 (Cohen-Mansfield, 1997).

Staff turnover in long term care facilities has been attributed to a variety of factors. Studies have examined structural aspects of organizations such as size, ownership, organizational policies, and wages. Few studies have investigated employees' perceptions of promotional opportunities, aspects of the work itself, the aged persons whom they serve, and their relationships with other staff members. Other variables that have received little attention are personal attributes of employees, such as demographics, training, and attitudes toward older people.

To compound the problem of recruitment and retention for long term care facilities, wages for long term care givers are not competitive in today's job market. A study conducted by Buck Consultants in 1998 demonstrated that RNs working in long term care facilities earn, on average, 16% less than RNs working in hospitals. LPNs and CNAs are earning 6% percent and 16% less, respectively, than their counterparts working

in hospitals (Decker et al., 2000). Current low levels of unemployment at the CNA level has decreased the labor pool and has made recruitment difficult. Fast food restaurants and other types of industry compete with long term care facilities for the same pool of entry-level workers. Long term care facilities generally offer salaries and benefits similar to, or below, those of other entry-level positions yet the CNA position requires more training and responsibility than positions at this level in other settings. This discrepancy can be attributed in part to the fact that the majority of care in long term care facilities receive much of their reimbursement from government programs, most often Medicaid and on occasion Medicare. Present payment is determined by historical cost, which leaves little room to increase wages in the present or the future. In addition, staff retention is also impacted by the local job market. Workers are less likely to remain in their current positions when dissatisfied if other employment opportunities are available.

In an attempt to understand contributing factors resulting in retention of employees, numerous studies have been conducted. The association between work satisfaction and retention of health care givers is well established. According to Kiyak, Namazi, and Kahana (1997), perceived job stress and commitment to the job are viewed as major factors in an employee's voluntary termination or withdrawal behaviors, such as a decreased level of job performance, tardiness, and frequent absenteeism. Job stress and intent to leave may be related to staff burnout among health care workers. In addition to problems created by staff members who actually leave, there may be a large number of employees who do not leave but work in a state of chronic dissatisfaction and with minimal commitment to the job (Kiyak et al., 1997). Studies reveal the most widely

reported job-related stresses are associated with scheduling problems, such as being asked to come in early or stay late, feeling unprepared for the job, and treatment by supervisors. Other major sources of dissatisfaction were identified as rate of pay, the handling of complaints, no opportunity for promotion, and limited or no benefits (Noelker, 2001).

Interestingly, depression is higher among CNAs than the general population. "Responses to the cEs-Depression Scale (Radloff, 1977), showed that 49% of the new nursing assistants compared to 32% of the older nursing assistants had scores of 16 or higher, suggesting clinical levels of depression" (Noelker, 2001).

Another major factor in the ability of long term care facilities to attract and retain direct-care personnel is financing. Without an adequate funding base, long term care facilities are unable to take the necessary steps to offer adequate compensation to employees. Nationally, the average charge for a long term care is $150 per day. This includes lodging, meals, nursing supervision, and activity programs (Caro & Kaffenberger, 2001). In 1998, Medicaid was the primary payment source for 68% of the long term care residents. Medicare was the primary payment source for 9% of the long term care residents. The labor component constitutes 77% of Medicare's long term care reimbursement to facilities. As the public sector provides most of the financing for long term care it is in the position to define the product. The public sector establishes eligibility for publicly financed care and defines the services for which it will provide financing. Medicare and Medicaid will continue to play a fundamental role in the recruitment and retention of personnel for two reasons: (1) the public sector will continue

to be the dominant source of payment, and (2) compensation, which will remain central to recruitment and retention of workers, depends fundamentally on financing.

Long term care facilities are highly regulated by federal and state government. Regulations extend to personnel matters, such as qualifications of personnel, training, and minimal staffing patterns. Currently, long term care facilities in the United States licensed to accept Medicare and Medicaid patients must adhere to mandated guidelines for sufficient nursing staff. Failure to meet the minimum guidelines will result in a citation to the facility, installation of a plan of correction, and the potential for imposition of monetary penalties.

As policymakers and consumer advocates are calling for increased staffing ratios, payment levels in government financing programs have decreased. The Medicare prospective payment system (PPS) was instituted in 1998 as mandated by the Balanced Budget Act of 1997 with a reduction in Medicare expenditures to long term care facilities totaling over $12 billion between 1998 and 2002 (Decker et al., 2000).

Stone and Weiner (2001) discuss the impact of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 which created the Temporary Assistance for Needy Family (TANF) program replacing the cash welfare system with a block grant program and provides states flexibility to states in developing job opportunities. Many states follow a "work first" strategy that discourages skill based training; although such policies are designed to get recipients into the work force, they conflict with federal nursing home training requirements. This decreases the available pool of low skilled workers.

Although numerous studies have examined factors related to retention, there is minimal literature comparing key factors between RNs, LPNs, and CNAs. Little research has been conducted in comparing job satisfaction between health care givers in rural and urban settings.

A recent survey of long term care administrators in North Dakota conducted by the North Dakota Long Term Care Association revealed 36% of the respondents identified the recruitment of RNs, LPNs, and CNAs as moderately to greatly difficult. As shown in Table 1, thirteen percent indicated retention is moderately to greatly difficult (N=112).

Table 1. Difficulty in Recruitment and Retention in North Dakota.

Level of Difficulty	Recruitment	Retention
No Difficulty	4%	6%
Little Difficulty	19%	26%
Neutral	38%	51%
Moderate Difficult	30%	12%
Great Difficulty	6%	1%

In the same survey, long term care administrators were asked to identify effective strategies in retention of employees. The most frequently cited strategies included health insurance, dental insurance, and retirement plans. The administrators were also asked what they believed to be the most significant barriers to recruitment of new employees. The most frequent responses included physical demands of long term care work, competition for workers, psychological stress of long term care work, and local employment opportunities for spouses.

Long term care facilities are challenged to develop and maintain adequate health care staff to meet current and future needs. In addition, the government has a crucial role in implementing and funding initiatives that develop a labor supply to meet the growing demand for health care givers. Long term care facilities have an important role to play by maintaining a work environment that is professionally satisfying and rewarding to the staff who provide the quality care that the elderly deserve.

The purpose of this study is to identify and measure key indicators of job satisfaction as they relate to retention, to identify differences in those variables, and examine the significance of those differences among RNs, LPNs, and CNAs who are providing long term health care in long term care facilities throughout North Dakota. Interest in the existence and identification of job satisfaction indicators among RNs, LPNs, and CNAs was the result of a job satisfaction study of North Dakota Emergency Medical Technicians (EMTs) conducted by Muus, Moreno, Gibbens, and Shea (2000) revealed differences in job satisfaction levels among EMTs (EMT- Paramedics, EMT-Intermediate, EMT-Basic). The three levels of EMTs have different levels of education and serve in different roles in patient care within the emergency medical services system. In reviewing the literature, empirical data examining the differences in job satisfaction among RNs, LPNs, and CNAs was not found. The identification of differences in job satisfaction indicators will allow for further refinement of retention strategies for each of the three groups of long term health care providers. The overall indicators associated with job satisfaction, such as role (job), compensation, supervision, and autonomy, are discussed in the literature review (Chapter II). Secondary analysis of the 2001 North

Dakota Long Term Care survey will be performed to identify, differentiate, and examine the significance of key indicators of job satisfaction among RNs, LPNs, and CNAs working in North Dakota long term care facilities.

Definition of Terms

Certified Nurse Assistant- CNAs are the principle care givers in long term care facilities. They provide basic care needs including personal hygiene, feeding, dressing, and activities of daily living. Training for these individuals is a twenty hour course.

Licensed Practical Nurse- Duties include administering most medications and medical treatments in the long term care setting under the supervision of a RN. LPNs provide routine bedside care and supervise CNAs. Training for these individuals include a twelve month training by an accredited practical nursing program (usually located in a vocational or technical school). LPNs are licensed in the state in which they practice.

Registered Nurse- RNs may have a baccalaureate degree, associate degree, or a diploma from an accredited school of nursing. RNs are registered and licensed by the state in which they are practicing. The majority of their time is spent on administrative and supervisory activities. RNs assess patients and develop patient care plans.

Rural- areas not classified as urban (U.S. Census Bureau, 1995). This includes farms, rural areas, and towns with less populations of less than 2,500.

Urban-places of 2,500 or more persons, incorporated as cities, villages, boroughs, and towns (U.S. Census Bureau, 1995).

This chapter has provided an introduction to the recruitment and retention challenges of long term care facilities, the significance of the problem, and some causes

for the shortage of long term health care givers. The need and purpose of this undertaking has also been discussed. Chapter II reviews the literature on job satisfaction, including job satisfaction theories, causes of job satisfaction, job satisfaction among health care providers, and recent job satisfaction studies. In addition, identification of key indicators of overall job satisfaction and their significance are addressed. Procedures and methodologies used in the data collection and analysis of the data are discussed in Chapter III. Results of the study are presented in Chapter IV. Chapter V addresses the conclusion of the study, its limitations, and recommendations for future research.

CHAPTER II

REVIEW OF THE LITERATURE

Overview of Job Satisfaction

Job satisfaction has been found to be one of the dominant factors in overall life satisfaction. Campbell, Converse, and Rogers (1976) found marriage and family to be more important. As job satisfaction is regarded so highly in the determination of an individual's overall life satisfaction, it is imperative to explore and identify factors resulting in job satisfaction.

A review of the literature on job satisfaction reveals numerous studies have been conducted, however, many of those studies contradict one another. Attempts to clarify the direction of causation have found that both directions exist as demonstrated in the literature.

Job satisfaction, the extent to which employees like their work, has long been a critical concept in the study of organizations. Dating back to the 1930s and 1940s, numerous studies have been conducted examining job satisfaction (Kornhauser & Sharp, 1932; Hoppcok, 1935; Roethlisberger and Dickson, 1939; Agho, Price, and Mueller, 1992). The Western Electric Research, conducted by Roethlisberger and Dickson in the 1930s, revealed job satisfaction was related to productivity. Conventional thought was that a content employee was more productive than a dissatisfied employee.

Later studies of the relationship between job satisfaction and productivity produced mixed findings (Brayfield & Crockett, 1955; Iaffaldano & Muchinsky, 1985).

Currently, serious doubts have been raised about the relationship of job satisfaction and increased productivity (Brayfield & Crockett, 1955; Iaffaldano and Muchinsky, 1985). More recent findings have demonstrated a definite relationship of job dissatisfaction with absenteeism and turnover. High absenteeism results in low productivity which is contradictory to the doubts raised by Brayfield and Crockett (1955) and Iaffaldano and Muchinsky (1985) regarding the relationship of job satisfaction and productivity. High levels of job satisfaction result in low incidents of absenteeism and turnover (Price & Mueller, 1986; Mueller & Price, 1990; George & Jones, 1993). Present interest in job satisfaction is concerned with its impact on commitment, absenteeism and turnover. Several studies have shown job satisfaction can partially explain variation in employees' commitment, absenteeism, and turnover (Brooke & Price, 1989; Michael & Spector, 1982; Mobley, Horner, & Hollingsworth,1978; Mowday, Porter, & Steers,1982; Mueller & Price, 1990; Porter, Steers, Mowday, & Boulian, 1974; Price & Mueller, 1981, 1986; Steers & Rhodes, 1978). This may provide a partial explanation for the anecdotal information regarding the high rates of absenteeism among CNAs. These studies would suggest that the absenteeism rate of CNAs may be related to job dissatisfaction.

Job Satisfaction Theories

Job satisfaction theories attempt to explain job satisfaction and the influence job satisfaction has upon job performance. Several theories exist regarding job satisfaction. The fulfillment theory (Locke, 1969; Tietjen & Myers, 1998) is one attempt to explain job

satisfaction. This fulfillment theory describes job satisfaction as needs or attainment of pleasurable outcomes necessary to make the workers feel satisfied. Workers whose needs are met or have obtained a pleasurable outcome are more fulfilled therefore, they should be more satisfied. According to the fulfillment theory, those workers with a higher income should be more satisfied than with lower incomes. This also relates to other facets of the job such as interest level in the job and level of security also contribute to job satisfaction (Locke, 1969). One of the limitations of this theory is it does not account for certain differences among individuals. In addition, it does not address what employees want from the job or what they believe they should receive from the job (Lawler, 1973).

The discrepancy theory (Katzell, 1964; Locke,1969; Tietjen & Myers, 1998) addresses how individuals feel about what they provided on the job. This theory is based upon the worker's perception of benefits. Perception of benefits is measured by the difference between what they receive and what they wish to receive, what they believe they should receive, and what they think they can receive in the current circumstances. Katzell describes satisfaction as: satisfaction = 1 - [(X -V) / V]. X equals the actual amount of the outcome and V equals the desired amount of the outcome. This theory has several limitations. This formula, as described by Muus (1996), leads one to believe the more an individual desires an outcome, the less dissatisfied the employee will be with a given discrepancy. In addition, this formula suggests that receiving more than the desired amount should produce less satisfaction than obtaining the desired quantity.

Another theory, the equity theory (Adams, 1965; Lawler, 1973) argues job satisfaction is determined by the perceived ratio of what one considers his/her net cost (input) and the return he/she receives (output). An over-award will result in feelings of guilt. Conversely, under-award will lead to feelings of injustice (Adams, 1965). The equity theory describes how an individual assesses their inputs and outputs to develop a perception of fairness of the input-output balance (Lawler, 1973).

The two factor theory describes factors related to job satisfaction or job dissatisfaction as independent variables (Herzberg, Mausner, Perston & Capwell,1957; Maidani, 1991). According to the two factor theory, satisfaction and dissatisfaction do not exist on a continuum from high satisfaction to high dissatisfaction. Two continua exist, one running from neutral to satisfied and one running from neutral to dissatisfied. Supporters of this theory believe that different facets of the job influence feelings of satisfaction or dissatisfaction; i.e., satisfiers and dissatisfiers. Satisfiers are job characteristics that are hypothesized to directly affect job satisfaction when present but do not contribute to dissatisfaction. Dissatisfiers are described as job aspects that cause dissatisfaction when present, for example, low pay, poor supervision, and low job security. Individuals pay little attention to the work environment when it is adequate (Herzberg et al., 1957).

Attribution theory (Harvey, 1981; Taylor, 1982; Tietjen & Myers, 1998) is a series of related theories on the cognitive means by which individuals attempt to pinpoint the causes of life events. Proponents of this theory hypothesize workers overlook the physical environment as they are accustomed to thinking that other people, not their

environment, are principal sources of influences on their work experience and attitudes. Supporters of the attribution theory suggests that people underestimate the role of individual's character in influencing people's behavior (Harvey, 1981). Individuals may overlook the physical environment for more diverse activities of other workers (Taylor, 1982). The tendency of workers to rate their work environment as inconsequential to their work satisfaction could be a due to habits or attributes more than actual contribution of the physical climate (Taylor, 1982).

Maslow's hierarchy of need theory (Maslow, 1968) hypothesized that the physical environment can satisfy individual's basic needs. This will only become pronounced when the physical environment does not meet the individual's needs. Maslow describes a hierarchal needs model. The basic, or first, needs are to provide for basic physiological need, such as food, water, and shelter. Once these needs are met, the individual focuses on security and safety. When an individual feels secure and safe, the individual can then focus on having a sense of belonging and positive social relationships. Once this is satisfied, focus is on the highest level of need, fulfilling one's potential as a human being. According to Maslow, the environment is a concern only when it fails to meet fundamental requirements. The physical environment is not considered by workers unless it fails to meet a basic need. Research has shown there is little empirical evidence to support Maslow's theory as it relates to job satisfaction (Wahba & Bridwell, 1975; Sundstrom & Sundstrom, 1986).

Several theorists have focused on the work environment as a major factor in determining job satisfaction. A pleasant work environment would contribute to the

employee's satisfaction, however, an uncomfortable work environment would detract from the employee's job and result in dissatisfaction (Holland, 1973).

Herzberg classified the physical environment as a dissatisfier. Evidence for this theory was derived from interviews with workers that directed them to describe situations which led to good or bad feelings about their job (Herzberg, Mausner & Snydermand, 1959). Working conditions arose only with incidents of work dissatisfaction and were rarely mentioned in incidents of satisfaction. Herzberg's theory closely resembles that of Maslow. Herzberg contended that workers gave the work environment little thought unless it was related to dissatisfaction. The work environment itself does not generate dissatisfaction.

According to Herzberg's motivation-hygiene theory (Herzberg et al., 1959; Vanderberg & Lance, 1992), motivation relies on internal/intrinsic and external factors to stimulate work-related behavior. Motivational factors include achievement, recognition, work itself, responsibility, and advancement. Negative factors include guilt, threats, power, and control. Herzberg describes movement (merely going through the motions of performing one's tasks) occurs when a worker does the job out of fear of punishment or failure to get extrinsic rewards, whereas motivation is a function of growth from getting intrinsic rewards out of interesting and challenging work. While movement and motivation appear similar, their dynamics are different. Movement requires constant reinforcement and short term results. Motivation functions out of the need for personal growth. Herzberg argues that two facets of a job exist and have the potential to contribute to job satisfaction or job dissatisfaction. The first facet is the work itself. The second is

the interpersonal relations encountered on the job. Herzberg believed the elements associated with job dissatisfaction were feelings of being treated unfairly, not treated with respect by supervisors and/or by co-workers, and finding the situation unpleasant or painful (painful emotionally and interpersonally).

A variety of descriptions and views of job satisfaction exist. Job satisfaction can be defined in terms of the extent of positive or negative emotions experienced at work. Argyle (1989) described job satisfaction as the absence of uneasiness, melancholy, or mental disturbance. Organizational commitment, how committed the employer is to his/her work and how faithful he/she is to the organization, was a concept described by Morrow (1983).

Numerous scales of job satisfaction have been constructed and used over time. One of the measures of job satisfaction used is the Job Description Index. This instrument contains five scales and twenty-two items (Smith, Kendal, & Hulin, 1969). Response choices are: yes, no, and uncertain. The five scales measure job satisfaction in five areas: work on present job; present pay; opportunities for promotion; supervision on the present job; and people on the present job. A similar scale was used as a reference list in the instrument used to measure job satisfaction of the long term care givers.

Causes of Job Satisfaction

A variety of researchers have described indicators of job satisfaction. Past research indicates that the most satisfying jobs provide: (1) autonomy and freedom from close supervision (Braude, 1975; Dehn & Asprey; 1995; Muus, 1996), (2) good pay and benefits (Braude, 1975; Baker, Oliver, Donahue & Huckabee, 1989; Muus, 1996), (3) job

security (Braude, 1975; Muus, 1996), (4) opportunity for promotion (Braude, 1975; Perry, 1978; Agho, Mueller & Price, 1990; Muus, 1996), (5) use of valued skills and abilities (Baker et al., 1989; Muus, 1996) (6) variety (Braude, 1975; Muus,1996), (7) interesting work (Braude,1975), (8) occupation prestige (Braude,1975; Mortimer, 1979; Sundstrom & Sundstrom, 1986; Muus, 1996) and (9) a positive work environment based on the worker's needs (Holland, 1973; Furnham & Walsh, 1991).

Criteria for a fulfilling job differ by occupation. Low levels of stress are present in jobs traditionally thought of as prestigious and promote job satisfaction. Work itself is believed to be major cause of job satisfaction, particularly intrinsic satisfaction (Wilde, 1995).

Loher, Noe, Mueller and Fitzgerald (1995) describe five distinct characteristics of work which result in job satisfaction. These include: (1) task identity (performing a clear and identifiable task), (2) task significance (degree to which the job has an impact on other's lives), (3) skill variety (number of different tasks involved in one's job), (4) autonomy (extent to which the job provides freedom, independence, and discretion), and (5) feedback (extent to which information about effectiveness is available and accessible).

Motivational job characteristics from the Job Characteristic Model of Job Design impact job satisfaction and staff retention (Riggs & Rantz, 2001). These job characteristics include (1) task identification, completion of an assignment in its entirety, (2) task significance, the impact of the job on others, (3) skill variety, a variety of activities utilizing different skills and abilities, and (4) autonomy, independence, and discretion allowed the employee in decision-making (Riggs & Rantz, 2001).

Numerous studies have shown job satisfaction associated with one's satisfaction of the community to be a strong and positive predictor of job satisfaction and retention (Dunkin, Stratton, Harris, Juhl & Geller, 1994; Dunkin, Pan, Muus, Harris & Geller, 1994; Pan, Dunkin, Muus, Harris & Geller, 1995). Studies from the mid 1960s measured community satisfaction based on feelings toward institutions in the community, such as the local government, the religious sector and the family (Goudy, 1977). Later studies focused on the availability of services. Examples include public service, medical, commerce sectors.

Warren (1970) argued that job satisfaction was related to an individual's satisfaction with his/her community. Warren measured community satisfaction using social indicators. Examples include: relationships, community autonomy, viability, power distribution, participation, commitment, heterogeneity, neighborhood control, and conflict . Ludewig and McCann (1980; Muus, 1996) measured community satisfaction using facility/service accessibility, institutional functions, and political efficacy.

Occupations and the job satisfaction they provide greatly vary. Some studies found the most satisfied employees are university educators, scientists, clergy and social workers (Sales & House, 1971). These occupations possess challenge, autonomy and skill diversity. The least satisfied employees worked on factory assembly lines. These positions have little variety, minimal autonomy, require a low skill level, employees usually do not see a finished product, and are usually in drab environments (Key, 1994).

Hours worked and the flexibility of schedules affect job satisfaction. Employees prefer to work fewer hours and have some flexibility with their schedules (Mann & Hoffman, 1960; Vroom, 1964).

Numerous studies have found pay to be a highly significant factor in job satisfaction. Pay has been found to be a greater source of dissatisfaction. In several studies, nearly 80% of employees have been dissatisfied with their level of pay (Herzberg, 1966). Relative pay has been found to be a better predictor of job satisfaction than absolute pay. This factor has a large impact as workers tend to know the amount they should be paid in comparison with others of equal skills and abilities. It is believed among workers that performance, seniority, age and education should be acknowledged and rewarded by higher pay. Dissatisfaction will result if a discrepancy exits between what employees feel they should be paid and their actual pay.

Job security as it relates to job satisfaction is ambiguous. When employees are distressed about losing their job, there is a negative impact on all other aspects of their work (Grove & Kerr, 1951; Gibson, 1993). A negative impact on all areas of an employee's work occurs when the employee becomes distressed about losing his/her job (Grove & Kerr, 1951; Gibson, 1993; Wilde, 1995). Individuals who are most concerned about job security are those in lower income groups. These workers are the easiest for managers to replace. Low skilled employees are the least likely to have savings to fall back on in the event of a layoff.

A strong correlation exists between job satisfaction and position or status. This includes both status within the organization and amount of prestige believed to be

associated with different occupations. Higher status positions tend to have positive job characteristics and higher pay. However, the most highly paid workers were less satisfied and experienced more stress than university educators, scientists, and the others. Individuals in low status positions are very satisfied if they can use their skills and are involved socially with their co-workers (Duke, 1989).

Opportunity for advancement is of high importance to some workers (Herzberg et al., 1959). It was found that achievement, recognition, and advancements were key to job satisfaction. Studies have found correlations between job satisfaction and the likelihood of promotions. The importance of the promotion was different for people in different jobs and social classes. Managerial and professional employees view their work as a career and promotion is very important. Semi-skilled and unskilled workers view promotion as less likely and are less likely associate promotions with job satisfaction (Argyle,1989).

Herzberg et al. (1959) found the opportunity for advancement is of high importance to workers. Achievement, recognition, and advancement led to positive job satisfaction. The likelihood of promotion was an important factor for job satisfaction with some employees. The importance of promotion differs with social class and different skill levels. Managerial and professional employees often view work as a career, thus promotion is given a higher emphasis. Promotions are less likely to be considered by unskilled or semi-skilled workers (Argyle, 1989).

Lawler (1973) found the working group (those employees working together) is one the most important components to job satisfaction. This emphasizes human relations

as an important consideration of a job. The importance of co-workers to job satisfaction emerges in several ways. Co-workers may be a source of assistance. They can provide an outlet for social communications, and provide support in times of stress (Duke, 1985). Cohesive groups have the highest job satisfaction. Cohesiveness includes frequent interaction among group members with similar backgrounds, values and cooperation (Lawler, 1973).

A strong relationship exists between one's popularity in a group and job satisfaction (Van Zelst, 1951). Smaller groups have higher satisfaction levels than do large groups (Milas, 1996). This finding suggests that in smaller groups all members can have more influence and communicate as they desire. In large groups, the majority of individuals will be at the lower end of the organizational hierarchy. Satisfaction is high when opportunities for interaction exist and dissatisfaction is high when physical separation does not allow for such interaction.

Satisfaction with a supervisor is a significant indicator of job satisfaction (Covin, Sightler, Kolenk, & Tudor, 1996). Supervision has been found to be associated with job dissatisfaction (Herzberg et al., 1959). Supervisors who are seen as making demands for improved work, treating different supervised employees inequitably, and by being viewed by these employees as removed, unfriendly, or unsympathetic and lead to job dissatisfaction. There are likely inherent restrictions on the expression of assertions and opinions between an employee and supervisor. Employees often cannot or will not freely express negative viewpoints they may have toward the supervisor to the degree that they might to a peer (Levinson, Price, Munden, Mandl & Soli, 1963).

Organizational characteristics have been found to affect the level of job satisfaction (Porter & Lawler, 1968; Muus, 1996). A small organization has fewer levels of hierarchy and provides more opportunity for participation in decision-making. This has been found to be positively related to job satisfaction (Argyle, 1989).

Individual differences have been found to have an effect on job satisfaction. Argyle (1989) and Tharp (1993) focused on the effect of extroversion and introversion on job satisfaction. Extroverts are talkative, express emotions easily, and are comfortable with people . Introverts are reserved, quiet, and tend to keep their emotions to themselves (Furnham & Springfield, 1993; Muus, 1996). Extroverts reported more positive working experiences and were found to be happier than introverts (Argyle, 1989). Extroverts prefer less structure and more employee interaction. Conversely, introverts are more satisfied in work environments where they can work alone and prefer structure (Tharp, 1993).

According to Kohn and Schooler (1982), there is evidence that one's personality does not influence one's choice of occupation but is a factor in how one feels about work. Job satisfaction depends on the fit between personality and job (Holland, 1973; Strauss, 1974). If an individual's needs match the rewards and work environment, the individual is more likely satisfied (Furnham & Schaeffer, 1984). While organizations often are not concerned with the over-qualified employee, however, it is of concern for the employee who is over qualified for his/her position. Over-qualified employees are more dissatisfied with their jobs. Those who are motivated by high achievement prefer challenging positions and show more correlation between job satisfaction and performance (Steers,

1975). Individuals with strong social needs are more satisfied when they are a member of a cohesive, cooperative group.

Individuals' job selections are reflections of their personalities and job can be categorized into six groups by Holland's (1973) theory. Each group symbolizes a separate personality type. The six groups are: realistic; investigative; artistic; social; enterprising; and conventional (Holland, 1973). Holland theorized the person-environment congruence for an employee in the workplace is positively linked to job satisfaction .

According to Knoop (1995), job involvement frequently includes identifying with the job, actively participating in the job, and perceiving job performance to be important to self-worth. Job satisfaction, as described by Hudson, refers to a person's general attitude toward the job (Knoop, 1995). Employee attitudes are reflected in tendencies to respond to the job and the organization, its people, and situations either positively or negatively. A person who is dissatisfied with a job may work less and be less committed to the employer. Knoop (1995) found involvement in work was related to commitment to the employing organization. However, different types of personalities become involved and derive satisfaction in different ways. It is likely that (1) people become involved and do derive satisfaction, (2) people become involved but do not derive satisfaction, (3) people do not become involved but derive satisfaction, or (4) people do not become involved and do derive satisfaction (Knoop, 1995).

According to Strauss (1974), job satisfaction can be linked to educational level. The more highly educated and the more intelligent the worker is, the more likely he or she

will be satisfied with his or her job. These workers usually have more interesting and challenging jobs. If they are not challenged, they are less satisfied with their job.

Strauss (1974) also found that older individuals were generally more satisfied with their jobs than younger workers. Intrinsic satisfaction was impacted the greatest by this outcome. One contributing factor to this is that older workers have more challenging and higher status positions. Rhodes (1983) found a correlation with age when rewards were held constant. The most likely reason for this is that older workers are more adjusted to their work situation.

Some studies have shown high morale in workers in their 20's which significantly decreases in their thirties and then rises again. Herzberg et al. (1957) described this as the U-shaped relationship between job satisfaction and age. It is this finding that explains when workers entered the labor market, they felt positively about their new role. During the worker's thirties, the perception of diminished opportunities combined with increasing tedium led to decreased job satisfaction. As the worker ages, he or she accepts his or her role and job satisfaction again increases. Some researchers have disputed the U-shaped relationship of age and job satisfaction. Weaver (1980) found that the younger employees were the most dissatisfied employees. Older individuals may have been always satisfied with their jobs. Warr (1992) describes this as the cohort effect.

Little overall differences were noted between genders. Most women's job are less skilled and salaries are less than those of men (Argyle, 1989). A study completed by Adelmann (1987) examined male and female workers and found that job satisfaction of men was affected by pay and control. Women found the social aspects of work more

important as well as feelings of achievement. Women who worked were found to be happier than those who did not, however, they experience more conflict with combining work with the demands of a family.

By 1954, numerous studies had been conducted examining the relationship of attitudes and performance. Brayfield and Crockett (1954) surveyed these studies. The conclusion of a 1930 study was upheld. There was little evidence that attitude bore any relationship to performance. Personnel who were highly satisfied with their network of interpersonal relationships were not necessarily highly motivated to produce. Satisfaction was related to absenteeism and turnover.

Vroom (1964) concluded there was a small relationship between satisfaction and performance. He cited twenty-three correlations and in twenty there was a positive relationship with a median correlation of $r = .14$. This explained only 2% of the relationship between satisfaction and performance.

Porter and Lawler (1968) reviewed thirty studies considering the relationship between job satisfaction and performance. They concluded that the causal relationship should be reversed. Satisfaction might result from high performance, rather than being the cause of it if the employee is rewarded for high performance. However, in many jobs, such as those on an assembly line, there is no room for high performance.

Iaffaldano and Muchinsky (1985) examined the relationship between job satisfaction and productivity. Several researchers attempted to show whether changes in job satisfaction lead to changes in total work output (the accomplishment of assigned tasks). Researchers found a weak positive relationship, with Pearson correlation of +

0.15 to + 0.17. Muus (1996) discussed research by Petty et al. (1984) which found an overall correlation of +0.31 between higher status work and work satisfaction.

Several studies produced results that contradicted the hypothesis that a satisfied worker is a productive worker. In the early 1930s, industrial psychologists conducted interviews and used questionnaires to determine the attitudes of 200-300 young girls working machines in a mill. They concluded that the girls' productivity had no relationship to their attitudes toward their work, their supervisor, or personnel policies. The relationship between satisfaction and worker productivity is not a simple relationship. Satisfaction in the absence of motivation or ability will not result in increased work performance. Conversely, there is more empirical evidence that job satisfaction results in productivity (Locke, 1969; Porter & Lawler, 1968). Despite the empirical data showing that productivity results in job satisfaction, the issue remains controversial.

Job satisfaction has been correlated to other types of positive work behavior. Mangoine and Quinn (1975) found there was less stealing, sabotage, intentional poor performance, and initiation of gossip when individuals are satisfied with their job. Non-academic university staff who more satisfied with their jobs engaged in a wide variety of positive actions. These individuals were more punctual, dependable, helpful, cooperative, tidy, created less waste, had fewer complaints, and had fewer injuries (Bateman & Organ, 1983).

Strauss (1974) found low job satisfaction correlated with high rates of anxiety, depression, psychosomatic symptoms, and coronary heart disease. Poor mental health is

more closely associated with low job satisfaction than it is with features of the job. This would imply that job satisfaction is an intervening condition in a causal chain (Wall, Clegg & Jackson,1978; Bogg & Cooper, 1995) to the extent job satisfaction and mental health are both affected by similar features of work. These include: repetitive, machine-paced work, poor supervision, conflict with co-workers, and other forms of stress (Cooper & Marshall, 1976). The combination of low status and low-grade work is associated with job dissatisfaction and with poor health. One possible cause is the tendency for those in poor health to have reduced option for employment. Kasl (1962) described clerical employees who tend to possess relatively poor health, as do those individuals in stressful occupations. It is possible that this finding may be more related to lifestyle differences, such as smoking, diet, and exercise (Argyle, 1989).

Strauss (1974) found social support from co-workers and supervisors is a major source of work satisfaction and positive mental health. This has been found to lessen the impact of stress at home more effectively than other sources of support. Individuals with stressful occupations are particularly in need of support from cohesive groups and receptive supervisors (Strauss, 1974).

Anderson and Pulich (2000) described factors they have identified as contributing to job satisfaction. Employees want compensation and benefits comparable to peers in other organizations. Compensation and benefits are described as competitive salary, health insurance, sick leave, and retirement. Employers are trying to eliminate these benefits. An environment of trust and respect where the employees feel they are making a contribution to organizational goals and objectives have been identified as factors

contributing to job satisfaction. In addition, professional autonomy, decision-making authority, and resources to perform jobs properly and effectively were factors resulting in positive job satisfaction. Employees may also want opportunities for professional growth and development. Recognition for the employees' contributions to organizational goals as well as a good working relationship with supervisors were seen as factors contributing to job satisfaction. Organizations that emphasize these behaviors have more highly satisfied employees (Anderson & Pulich, 2000).

Historically, variations in job satisfaction have been predominantly explained by situational variables such as autonomy, routinization, and work cohesion (Agho et al., 1992). Autonomy, the degree to which employees have the freedom to make job-related decisions, is believed to have a positive impact on employees' job satisfaction. Routinization, the degree to which employees perform repetitive tasks, is believed to have a negative impact on employees' job satisfaction. Work cohesion, the extent to which employees have close friends in their immediate work units, appear to influence positively employees' job satisfaction (Agho et al., 1992). The concept of positive affectivity and negative affectivity have been introduced into some studies of organizations. Positive affectivity is an individual's disposition to be happy across time and situations; negative affectivity is an individual's disposition to experience discomfort across time and situations. Empirical evidence suggests that positive affectivity and negative affectivity may explain variations in employees' job satisfaction (Straw, Bell, & Clausen, 1996; , et al., 1992; Vanderberg & Lance, 1992), and have shown that variations in job satisfaction can be explained by an individual's affectivity disposition. Employees

who are predisposed to be happy (positive affectivity) are more likely to have higher job satisfaction that those who are predisposed to experience discomfort or negative affectivity (Agho et al., 1992).

Worker turnover has been of keen interest to managers and researchers. Lambert, Hogan, and Barton (2001) developed a study using a structural model incorporating four core components of job turnover (demographic characteristics, work environment, job satisfaction, and turnover intent) and tested this model using a national sample of American workers. The results indicated that the work environment is more important in shaping worker job satisfaction than demographic characteristics and that job satisfaction is a significant factor in turnover intent. Job satisfaction is a key mediating variable between the work environment turnover intent. Over the past several decades, interest in job satisfaction has intensified. In response to employee turnover, especially voluntary turnover, (Mobley et al., 1978; Lambert et al., 2001), proposed a theoretical causal process to explain this phenomenon. The causal process incorporates the four components of employee turnover. The first is demographic characteristics, this is what influences a person's decision whether to remain with or to leave a job. Second, job satisfaction impacts a cognitive withdrawal process stressing turnover intention. Third, work environment factors significantly contribute to shaping employee job satisfaction which contributes to turnover intention. Fourth, turnover intent influences voluntary turnover. It has been theorized that job satisfaction is a key predictor of worker turnover. Overall job satisfaction can be a predictor of employee behavior (Lambert et al., 2001). In addition, it has been theorized that high levels of job dissatisfaction leads to employee

withdrawal, particularly in terms of voluntary turnover. Lambert et al. (2001) theorize the effect of job satisfaction on turnover is only half of the equation. They emphasize it is equally important to explore, confirm, and understand the components of job satisfaction. Identifying factors that influence satisfaction provides administrators and managers with meaningful and necessary information to make intelligent decisions regarding interventions aimed at increasing employee job satisfaction. In addition, it is important to look at causes and effects of job satisfaction. Lambert et al. (2001) describe two general categories of factors that influence employee job satisfaction: demographic characteristics and work environment factors. Job satisfaction negatively affects turnover intent and turnover intent directly impacts voluntary turnover. The results of this study supported the hypothesis that the work environment is very important in shaping job satisfaction. It also supports the hypothesis that job satisfaction is a key component of turnover intent.

In the causal model of turnover proposed by Price and Mueller (1981), job characteristics and opportunities are hypothesized to influence job satisfaction, which in turn, affects the individual's intention to stay or to leave and subsequent termination (Kiyak et al., 1997). As noted by Price and Mueller (1981), opportunities for alternative jobs may not exist. One may wish to leave one's job due to dissatisfaction but may not be able to do so if other jobs are unavailable. This results in a continuous cycle of dissatisfaction, frustration, and an unfulfilled desire to leave (Kiyak et al., 1997). Kiyak's study supported Price and Mueller's findings (1981) that job satisfaction was less important in predicting actual turnover than were the employee's expressed intentions to leave. "Rarely do professionals voluntarily terminate due to the difficulty of the work

itself, however, accounts of persons leaving their job due to being treated badly are endless." (Timmreck, 2001).

Job Satisfaction Among Healthcare Providers

Role (the position held by the employee in an organization) stress and certain job characteristics are related to staff retention. Job-related role stress is problematic for those workers who deal with both supervisors and residents. CNAs provide direct care for 10 to 20 residents who have limited physical and cognitive function. The number of residents assigned combined with the frequency assignments are changed contribute to role stress. CNAs are subject to additional conflict as they attempt to deal with residents and their families, direct supervisors and administrators, co-workers, and ancillary services such as activities and nutrition.

It has been found that tension on the job is a predictor of job dissatisfaction among nurses (Jolma, 1990; Bushy & Banik, 1991), particularly tension associated work tasks and working with physicians (Bateman & Strassen, 1983). Tension was also found to be a significant predictor of job dissatisfaction when associated with supervision and income (Bateman & Strassen, 1983). Using causal modeling, French, Caplan, and Harrison (1982) demonstrated the relationship described by Bateman and Strassen. French et al. concluded that job dissatisfaction and boredom were precursors to anxiety and depression.

Recent Research on Nursing Care

Butler and Parsons (Timmreck, 2001) identified several factors in the health care setting that they concluded contributed to job satisfaction. These factors promoting job

satisfaction of nursing personnel included recognition of achievement, adequate staffing, appreciation, autonomy, child care facilities, clinical decision making, considerate scheduling, professional growth, quality patient care, and supervisory support. Butler and Parsons (Timmreck, 2001) also identified several factors that contribute to job dissatisfaction: excessive responsibility, inadequate staffing, too much paperwork, poor relationships with physicians, poor communication, poor supervision, and inadequate salary.

According to Riggs and Rantz (2001), several factors contribute to job satisfaction for health care givers in long term care facilities. They describe several organizational factors that influence job satisfaction and retention. These factors include (1) an open flexible organizational structure that contributes to the commitment, satisfaction, and retention of employees, (2) shared participation in decision-making, (3) equity in the implementation of policies, (4) access to formal and informal support systems, (5) effective interpersonal relationships and supervision, and (6) multi-channeled open communications.

Riggs and Rantz (2001) used social exchange theory as a means of explaining interpersonal behaviors seen in long term care settings. Social exchange theory is often found in organizational and social psychology. It provides a framework for understanding interpersonal processes within a social context. The focus of this theory is the reciprocal nature of interpersonal relationships. The theory attempts to explain how social relationships emerge, persist, and terminate over time. This theory reflects actions that represent "behaviors that are motivated by an expected return or response from

another." (Riggs & Rantz, 2001). A behavior will cease if the expected reactions are not forthcoming. If the behavior is rewarded, it will be reinforced and social bonds will be created. People develop a greater liking for and commitment to those who praise and approve of them and from whom they receive the greatest reward or reinforcement for their actions (Riggs & Rantz, 2001).

Most frontline long term care workers are women, approximately 93% (Stone & Wiener, 2001). The majority of frontline workers are relatively disadvantaged economically. They tend to have low levels of education; approximately 25% of the CNAs have not completed high school. Median earnings in the late 1980s were $9,000 and many were living at or below the poverty level (Stone & Wiener, 2001). These workers engage in work that is physically and emotionally demanding yet their occupation is among the lowest paid in the service industry.

Stone and Flood (2001) argued that frontline health care workers are poorly trained. They argued that no incentive exists for continuing education. One of the most important factors in job satisfaction for CNAs is management style. Feedback from supervisors is needed to encourage CNAs to be personally responsible for their work (Stone & Flood, 2001).

Turnover

Staff turnover in long term care facilities has been attributed to a variety of factors. Studies have examined aspects of organizational structure such as size, ownership, organizational policies, and wages. Few studies have focused on employee

perceptions of the work itself, relationships to other staff members, and personal attributes.

In a study of job commitment and turnover among women working in long term care facilities conducted by Kiyak, Namazi, and Kahana (1997), a modified version of a causal model of turnover developed by Price and Mueller was used. Three sets of predictors were tested to explain the causes for turnover: personal characteristics, job characteristics, and attitudes. Findings showed the best predictor of turnover was the employee's intention to leave, followed by the length of employment (shorter), and age (younger). Intention to leave was predicted by age (younger), length of employment (shorter), job dissatisfaction, and type of work for the employee worked (community). Dissatisfaction was found to be a major factor that results in a desire to leave the job and may lead to employee turnover or continued dissatisfaction with the job.

Researchers have pointed to the importance of the employee's relationship to, and subjective appraisal of the job in predicting turnover. They report that significant predictors of turnover include the employee's stated commitment to the job, satisfaction with the job, rapport with the clients, and intent to leave the organization. Perceived job stress and commitment to the job are viewed as pivotal factors in voluntary job termination, or withdrawal behaviors such as decreased or poor job performance and frequent absenteeism (Kiyak et al., 1997). The problem of stress and intent to either leave or remain on the job may be related to the phenomenon of staff burnout among health care workers. Certain job situations have a strong emotional impact on workers which threatens their continued motivation and ability to perform the job. Burn out is

defined by VanYperen, Buunk, and Schaufehi (1992) as emotional exhaustion, depersonalization, and a decrease in personal accomplishments. It has been found to be more widespread among those caregivers who perceive an imbalance in their relationship with patients, those with low communal orientation (desire to give and receive benefits in response to the need and out of concern for others), and those who both perceive an imbalance and are low in communal orientation (VanYperen et al., 1992). Job satisfaction was found to be less important in predicting actual turnover than were the employee's expressed intentions to leave. This is demonstrated by professionals who expressed high job satisfaction but were more likely to resign voluntarily one year later (Kiyak et al., 1997).

In reviewing the literature, studies were found examining job satisfaction of RNs, LPNs, and CNAs as individual groups in the literature. No studies identifying differences among the three groups were found.

Chapter III will detail the methodology used in this study. Sample structure, individual variables, statistical procedures, and analytical methods used will be discussed.

CHAPTER III

DATA AND METHODS

The 2001 North Dakota Long Term Care workforce study was mandated and funded by the North Dakota State Legislature. The North Dakota Department of Human Services in collaboration with the North Dakota Long Term Care Association were given the responsibility to collect and analyze data related to recruitment and retention of long term care providers in the state.

Representatives from the North Dakota Department of Human Services, the North Dakota Long Term Care Association, and the UND Center for Rural Health, collaboratively constructed the questionnaire that was used. The questionnaire was created by using information from previous job satisfaction studies of physician assistants, emergency medical services technicians, and nurses. In addition, findings from other general job satisfaction studies were considered when constructing the instrument. Individuals items used in this study were derived from the literature on predictors of job satisfaction and previously established theoretical models. To measure job satisfaction, questions 8 (degree to which each factor played a part in your decision to work in long term care), 15 (to what extent did the following issues play in others' decision to quit), 16 (rate your level of job satisfaction), and 17 (how satisfied are you with following factors in your present community) were analyzed. A five-item Likert

scale was used to measure the level of satisfaction of the various items (1= least satisfied; 5= most satisfied). The questionnaire is found in Appendix A.

This study is a secondary data analysis of information related to job satisfaction and the recruitment and retention of long term care health givers obtained by the North Dakota Long Term Care Association. All identifiers related to persons had been removed from the database prior to receiving the data. Permission to analyze these data was sought and obtained from North Dakota Long Term Care Association and the North Dakota Department of Human Services. The study was subsequently reviewed by the University of North Dakota Institutional Review Board (see Appendix B).

It was the task of the North Dakota Long Term Care Association to make the questionnaire available to all long term care facilities throughout the state via the North Dakota Long Term Care Association web site. The intent was to survey the entire population of RNs, LPNs, and CNAs working in North Dakota long term care facilities. Data collection began in November, 2001 and concluded in April, 2002 yielding 4,908 responses. Four hundred of these responses were submitted via the internet. The remaining 4,508 were downloaded from the website and returned to the North Dakota Long Term Care Association as hard copies. The North Dakota Long Term Care Association estimates approximately 10,000 persons are employed in long term care facilities throughout the state, however, the number of practicing RNs, LPNs, and CNAs in long care facilities is not tracked. Because the actual number of practicing RNs, LPNs, and CNAs is not available, it is not possible to accurately calculate the response rate

based on all practicing long term health givers. All results were entered into a SPSS, version 9.0 software database.

Of the 4,908 responses, 2,577 were RNs, LPNs, and CNAs. There were 465 responses from RNs, 474 responses from LPNs, and 1,638 responses from CNAs. Many ancillary providers (physical therapists, occupational therapists, etc.) had also responded to the study, thus explaining the difference in the total number of responses and the number of health care givers that were the target population of this study. All statistical analysis was completed on only the occupations identified as RN, LPN, and CNA. This was completed by selecting out RN, LPN, and CNA in the occupation variable.

Questions 8 (rank the degree to which each of the listed factors played a part in your decision to work in long term care), 15 (to what extent did the listed issues play a role in others' decision to quit), 16 (your level of job satisfaction), and 17 (how satisfied are you with the following factors in your present community) were used from the questionnaire to examine job satisfaction. The use of these questions resulted in the inclusion of forty-nine variables in the analysis process. The decision to choose these items was based on the identification of indicators resulting in job satisfaction (or dissatisfaction) presented in previous studies. Specific studies will be referenced in relationship to the factors and the independent variables later in this chapter. These studies are discussed in greater detail in the literature review in Chapter II.

The initial step in this secondary analysis was to run univariate frequencies to determine general characteristics and attitudes of the health care givers. Length of time the respondent's expected to remain in their job was examined. Previous studies have

shown this to be significant predictor of job satisfaction. In addition, this item is important in determining the future workforce needs in long term care. Decker et al. estimated the annual turnover rates for RNs is between 28% and 59%, turnover rates for LPNs at between 27% and 61%, and turnover rates for CNAs is 143%. Noelker (2001) estimated over 90% of CNAs leave their jobs within ninety days. Intent to leave one's job is identified by Kiyak et al. (1997) to be the best predictor of turnover by long term care health givers.

Factor Analysis

Factor analysis was used to reduce the number of items into usable scales. The extraction method used was Principle Component Analysis, followed by a Varimax rotation; the combination represents a standard practice for factor analysis. To allow for interpretation, an orthogonal rotation was used: Varimax with Kaiser Normalization. In this rotation, each factor tends to load highly on a smaller number of variables and low or very low on the other variables, thus making interpretation of the resulting factors easier. The communalities converged in 11 rotations. In this study, thirteen components (factors) were retained. Components with Eigenvalues of 1.0 or greater were retained; this is a commonly used and acceptable determinant value. Factors were identified and labeled by their communalities as follows in descending order of their initial Eigenvalues: community, supervisory concerns, conditions of the job, strain of risk, intrinsic value, co-workers, respect, staffing, continuing education, financial concerns, equipment/supplies, attitude towards work, and economic concerns. The identified scales were further refined by using a reliability analysis process. The final set of scales that survived these

preliminary processes were then used as variables and the testing of the hypothesis was done on the summated ratings for the scales.

One-way ANOVA was performed to test the hypothesis that differences exist among the groups and identify those factors as being significant at the < .05 level. Significant factors were: supervisory concerns (Factor 2), strain of risk (Factor 4), respect (Factor 7), staffing (Factor 8), continuing education (Factor 9), and economic concerns (Factor 13).

Post hoc testing was performed on the factors identified as significant at the <.05 level using Tukey's HSD to identify all pairwise group differences, thereby testing the hypothesis of the significance of the differences among the groups. Six variables showed significantly different responses among the three groups at the <.05 level. The variables identified as having significantly different responses were: supervisory concerns, strain of risk, respect, staffing, continuing education, and economic concerns. In addition to identifying significant differences among the groups, the use of Tukey's HSD controls for a Type I experimentalwise error rate. Variables that were identified in the reliability analysis process were used as predictors of job satisfaction.

Factors Defined

Factor 1, Community, was comprised of the following items: size of community, social opportunity, overall environment for children, quality of schools, degree of safety, health care system, community satisfaction, and spousal satisfaction with community. The importance of the community in relationship to job satisfaction has been

demonstrated in a number of studies and has prevailed over time (Warren, 1970; Goudy, 1977; Dunkin et al., 1994; Dunkin et al., 1994; Pan et al., 1995; Muus, 1996).

Supervisory concerns, Factor 2, included the following items: supervisor competency, supervisor leadership, and supervisor availability. Herzberg et al. (1996) discussed poor supervision as a dissatisfier. Satisfaction with supervision is a significant predictor of job satisfaction (Coven et al., 1996). Receptive supervisors and supportive supervisors are a major source of work satisfaction and positive mental health (Strauss, 1974).

Factor 3, conditions of the job variables included: working conditions, psychological stress, physical stress/demands, overworked/short-staffed. The overall work environment (condition) has not been found to be related to job satisfaction; however, it is a contributor to dissatisfaction when is not adequate (Herzberg et al., 1959; Maslow, 1968; Harvey, 1981; Tietjen & Meyers, 1998). The importance of psychological stress has been shown to be an important indicator of job dissatisfaction (Herzberg et al., 1959; Strauss, 1974; Wall et al., 1978; Argyle, 1989; Bogg & Cooper, 1995; Kiyak et al., 1997; Anderson & Pulich, 2000; Timmreck, 2001; Riggs & Rantz, 2001). Perceived job stress has been identified as a pivotal factor in voluntary job termination (Kiyak et al., 1997). Among health care workers, stress and tension have been found to contribute to job dissatisfaction (Bateman & Strassen, 1983; Johma, 1990; Buschy & Banik, 1991). When stress and tension are associated with work tasks, working with physicians, supervision, and income it becomes a very significant predictor of dissatisfaction (Bateman & Strassen, 1983). Staffing does not contribute to job satisfaction, however,

inadequate staffing contributes to dissatisfaction as it results in increased workloads and a decrease in the quality of care provided (Hendrix & Foreman, 2001). Staffing may be associated with the work environment, where again it is associated with dissatisfaction (Maslow, 1968; Holland, 1973; Herzberg et al., 1957).

Factor 4, strain of work, is comprised of shift work, training requirements, health hazards, and medical liability. Shift work is associated with job dissatisfaction. Shift work results in an interruption in an individual's circadian rhythm by interfering with one's normal patterns of eating, sleeping, socialization, and entertainment (Maslow, 1968). Shift work may be associated with an individual's need to have some contribution to the decision-making process which is a significant contributing factor to job satisfaction (Mann & Hoffman, 1960; Vroom, 1964; Anderson & Pulich, 2000; Rigss et al., 2001). Training requirements, or level of education, are discussed by Strauss (1974). Strauss suggests that higher levels of education are associated with higher levels of job satisfaction. In addition, workers who do not feel challenged, such as LPNs, or over qualified, RNs, for their position are less satisfied with their jobs. It is of interest to note that in reviewing the literature, health hazards and medical liability were not discussed as indicators of job satisfaction or dissatisfaction.

Intrinsic rewards, Factor 5, included community need, interest in long term care, satisfaction with helping others, and challenge of long term care. The motivation-hygiene theory (Herzberg et al., 1959; Vanderberg & Lance, 1992; Timmreck, 2001) supports the importance of intrinsic rewards as a factor in job satisfaction and intrinsic rewards are the result of interesting and challenging work. Employees desire to contribute to the

organization's overall goals and objectives (Anderson & Pulich, 2000). Adelmann (1987) argued that women received greater job satisfaction from jobs that involved helping others. Interest, per se, is not addressed in the literature. However, interest in one's job can be associated with the nature of the work itself (Braude, 1975), the challenge of the job, skills, variety, and personality (Steers, 1975; Furnham & Schaffer, 1984; Key, 1994). Employees who feel challenged indicate a higher level of job satisfaction (Herzberg et al., 1959; Strauss, 1974; Steers, 1975; French, 1982; Agho et al., 1992; Key, 1994).

Factor 6, co-workers, was comprised of the following items: close relationship with co-workers and emotional support from co-workers. The importance of relationships with co-workers has been found to be one of the most important components to job satisfaction. Cohesive groups have been found to have the highest level of job satisfaction (Lawler, 1973; Strauss, 1974; Duke, 1985; Agho et al., 1992; Timmreck, 2001; Riggs & Rantz, 2001).

Factor 7, Respect, included: degree of responsibility, physician support, respect from nurses, and respect from physicians. Responsibility, autonomy, and respect have been described as a predictor of job satisfaction (Herzberg et al., 1959; Smith et al., 1969; Timmreck, 2001), however several studies have shown that this is of special importance to health care workers (Braude, 1975; Loher et al., 1995; Riggs & Rantz, 2001).

Staffing, Factor 8, was comprised of size of staff and quantity of others doing the same job. Inadequate staffing levels increase workloads for the staff which results in dissatisfaction (Hendrix & Foreman, 2001) and results in a decreased quality of care

received to the clients. Staffing can be associated with the work environment which does not contribute to job satisfaction, however, when problematic can contribute to dissatisfaction (Maslow, 1968; Holland, 1973; Herzberg et al., 1957).

Factor 9, continuing education, included access to continuing education and quality of continuing education. Continuing education was not specifically addressed in the literature but can be associated with motivation, opportunity for advancement, personal and professional growth. These indicators result in job satisfaction (Herzberg et al., 1959; Porter & Lawler, 1968; Smith et al., 1969; Braude, 1975; Perry, 1978; Vanderberg & Lance, 1992; Agho et al., 1993; Timmreck, 2001).

Financial concerns, Factor 10, included pay and benefits. The importance of the relationship between financial compensation and job satisfaction is supported by numerous studies. Adams (1965) and Lawler (1973) argue in the equity theory that job satisfaction is determined by the input (work) and the output (the return) ratio perceived by the employee. Pay has a large impact on job satisfaction as employees know what they should be paid in comparison to others with equal skills and abilities (Herzberg, 1966). The importance of this hypothesis is also supported by Anderson and Pullick (2000).

Factor 11, equipment/supplies, was comprised of quality and quantity of equipment. Again this is related to the work environment as described above.

Economic concerns, Factor 12, included ability to earn a living and few job opportunities. Earning a living is important as it allows for the provision of basic needs of individuals, such as food, shelter, clothing. As Maslow describes in the hierarchy of needs theory (1968), basic needs must be provided for before one can move to providing

for safety and security followed by a sense of belonging and positive social relationships. Few job opportunities may result in an individual who may wish to leave his/her job due to job dissatisfaction but may not be able to do so if other job opportunities are not available resulting in a continuous cycle of dissatisfaction, frustration, and an unfulfilled desire to leave their job (Price & Mueller, 1981; Kiyak et al., 1997).

Factor 13, attitude toward work, was comprised of loss of interest in long term care and personality conflicts. Loss of interest in long term care is addressed in the discussion in Factor 5. The importance of personality conflicts is addressed in Factor 6 in relationship to co-workers.

Individual Item Analysis

Individual item variables were identified by using a reliability analysis process. The purpose of examining the individual items was two-fold. First, comparative analysis (one-way ANOVA) is a statistical procedure and factor analysis is a method of analysis. Collapsing data results in the loss of information and can mesh relationships. It provides the opportunity to examine how each of three groups responded to each individual item and identify the variables used in the factor analysis. One-way ANOVA was performed to determine differences in responses among the RNs, LPNs, and the CNAs. To test the hypothesis, the significance of the differences between the groups, Tukey's HSD was performed on those items (variables) identified as being significant at the <.05 level in the one-way ANOVA test to identify all pairwise group differences at the < .05 level. Significant differences in responses among the RNs, LPNs, and CNAs were noted in the following individual items: community need; earn a living; few job opportunities;

undesirable hours; shift work; training requirements; loss of interest in long term care; poor management; health hazards; medical liability; size of staff; degree of autonomy; access to continuing education; quality of continuing education; time for co-worker interaction; supervisor's level of competence; professional respect from nurses; overall community environment for children; quality of schools; degree of community safety, and spouse's overall satisfaction. These variables, identified as significant at the $< .05$ level, were used to predict job satisfaction.

CHAPTER IV

RESULTS

Univariate frequencies were calculated to determine general characteristics and attitudes of the health care givers. Demographically, 47% (1,204) of the respondents were from urban areas and 53% (1,370) were from rural areas. The U.S. Census Bureau defines rural as non-metropolitan areas with populations of less than 2,500. This definition does not adequately reflect the ruralness and remoteness of North Dakota in comparison to other areas in the nation. According to the 2000 U.S. Census data, the total population of North Dakota is only 642,000. The majority of the population resides in the eastern portion of the state. The state overall has 9.3 people per square mile compared to 79.6 persons per square mile nationally. Thirty-six of the fifty-three counties in the state are federally designated frontier counties. Frontier counties are defined as counties with less than seven people per square mile (U.S. Census Bureau). Although some controversy exists over this definition, it is currently used to determine eligibility for many federal programs and is generally accepted by researchers studying rural issues. No cities in North Dakota equal or exceed a population of 100,000. The state has no Level I trauma center and has four Level II trauma centers (two of these are located on the eastern border). The state has two schools of higher education that offer a Bachelor of

Nursing (BSN) degree. North Dakota requires a BSN as the basic entry level for Registered Nurses.

Respondents were asked the length of time they expected to remain in their job, 4% (99) responded less than one year; 13% (329) indicated one to two years; 16% (411) responded three to four years; and 62% (1,607) indicated five years or greater. Ninety-seven percent of the RNs indicated they expected to stay in their job for longer than one year. Ninety-seven percent of the LPNs indicated they expected to stay in their job for longer than one year and 94% of the CNAs responded to staying in their job for longer than one year. This contradicts the findings of Decker et al. (2000) discussed in Chapter I. It would appear that the findings in this study would suggest that North Dakota has a more stable long term care giver workforce than do other areas of the nation. However, the possibility exists that those who stay in their job or intend to leave their job in less than one year are among the non-respondents.

Several questions were asked regarding benefits provided by employers. Fifty-three percent of the respondents indicated medical insurance; 39% had life insurance; 36% indicated dental insurance; and 41% had some type of retirement benefit.

Four questions from the questionnaire were used to measure job satisfaction, questions eight, fifteen, sixteen, and seventeen. Satisfaction with various aspects of the decision to work in long term care, why others leave their jobs in long term care, community, and the respondent's level of job satisfaction were measured on a 5-point Likert scale (1= least satisfied; 5= most satisfied).

Factor analysis was used to test for the existence and the identification of indicators associated with job satisfaction. This reduced the number of items into useable scales and thirteen components (factors) were retained. Components with Eigenvalues of 1.0 (a commonly used and acceptable determinant) were retained. It should be noted that the Eigenvalue significantly decreased after the first component (community) and following the fourth component (strain of work). Components twelve (attitude towards work) and thirteen (economic concerns) were just slightly over 1.0. See Appendix C for Total Variance Explained. An orthogonal rotation was used, Varimax with Kaiser Normalization, and the communalities converged in eleven rotations. See Appendix D for Rotated Component Matrix.

As shown in Table 2, the thirteen factors were titled by communality of the variables in each and then assigned to the appropriate dimension: decision to work in long term care, why others have quit their long term care jobs, community, the respondent's level of job satisfaction.

The decision to work in long term care dimension was comprised of two factors. One factor was intrinsic rewards (Factor 5) which was comprised of the following items: community need, interest in long term care, satisfaction with helping others, and challenge of long term care. This factor had an alpha coefficient of 0.68. The cumulative mean score was 14.40 with a standard deviation of 3.54. The second factor was economic concern (Factor 13) and was comprised of earning a living and few job opportunities. This factor had an alpha score of 0.52 with a cumulative mean score of 7.34 and a standard deviation of 2.28.

Table 2. Factor Comprising Dimensions.

Factors Comprising Dimensions
Decision to work in long term care
Factor 5: Intrinsic reward (Eigenvalue = 1.768)
Factor 13: Economic concern (Eigenvalue = 4.452)
Why others have quit their long term care jobs
Factor 3: Conditions of the job (Eigenvalue = 3.385)
Factor 4: Strain of risk (Eigenvalue = 2.231)
Factor 12: Attitude toward work (Eigenvalue =1.049)
Factor 10: Financial concerns (Eigenvalue = 1.247)
Community
Factor 1: Community (Eigenvalue = 0.979)
Your level of job satisfaction
Factor 2: Supervisory concerns (Eigenvalue = 4.452)
Factor 6: Co-workers (Eigenvalue = 1.613)
Factor 7: Respect (Eigenvalue = 1.551)
Factor 9: Continuing Education (Eigenvalue = 1.273)
Factor 11: Equipment/supplies (Eigenvalue = 1.130)
Factor 8: Staffing (Eigenvalue = 1.400)

The dimension of why others leave their jobs in long term care was comprised of four factors. The first was conditions of the job (Factor 3) which was comprised of working conditions, psychological stress, physical stress/demands, and overworked/short-staffed. The alpha coefficient was 0.80. The cumulative mean score was 15.04 with a standard deviation of 3.98. The second factor was strain of risks (Factor 4). This factor was comprised of shift work, training requirements, health hazards, and medical liability.

The alpha coefficient was 0.57 with a cumulative mean score of 10.28 with a standard deviation of 3.42. The third factor was attitude toward work (Factor 12) and was comprised of loss of interest in long term care and personality conflicts. The alpha coefficient was 0.57 with a cumulative mean score of 6.21 and a standard deviation of 2.23. The fourth factor, financial concerns (Factor 10) was comprised of pay and benefits. The alpha coefficient was 0.78 with a cumulative mean score of 6.57 and a standard deviation of 2.61.

The community dimension was comprised of one factor, community (Factor 1). This factor was comprised of size of community, social opportunity, overall environment for children, quality of schools, degree of safety, health care system, community satisfaction, and spousal satisfaction with community. The alpha coefficient was 0.88 with a cumulative mean score of 29.43 and a standard deviation of 6.38.

The level of the respondents' job satisfaction was comprised of six factors. One factor, supervisory concerns (Factor 2) was comprised of supervisor competency, supervisor leadership, and supervisor availability. The alpha coefficient was 0.93 with a cumulative mean score of 10.64 and a standard deviation of 3.54. The second factor, co-workers (Factor 6) was comprised of close relationships with co-workers and emotional support from co-workers. The alpha coefficient was 0.87 with a cumulative mean score of 7.17 and a standard deviation of 2.05. The third factor, respect (Factor 7) was comprised of physician support, respect from physicians, respect from nurses, and degree of autonomy. The alpha coefficient was 0.75 with a cumulative mean of 14.10 and a standard deviation of 3.36. The fourth factor, equipment and supplies (Factor 11) was

comprised of quantity of equipment and quality of equipment. This factor had an alpha coefficient of 0.91. The cumulative mean was 6.88 with a standard deviation of 2.18. The fifth factor, continuing education was comprised of access to continuing education and quality of continuing education. The alpha coefficient was 0.92 with a cumulative mean of 6.81 and a standard deviation of 2.20. The final factor was staffing (Factor 8) and was comprised of size of staff and others doing the same job. The alpha coefficient was 0.73, the cumulative mean was 6.84 with a standard deviation of 2.11.

Subsequently, reliability testing was also performed on the thirteen factors. See Appendix E for Summated Means, Alpha Coefficients, Individual Item Means, and Corrected Item-total Correlation.

To test the hypothesis that differences exist among RNs, LPNs, and CNAs one-way ANOVA was performed on the summated means of each factor to identify differences in responses among the RNs, LPNs, and CNAs (see Table 3). The purpose for examining the summated means is that small values or small differences in the responses may be important when considering the large group.

Table 3. Summated Means of Factors.

Factors	Mean	S.D.	F	Sig.
Factor 1-Community	29.4385	6.38123	1.663	.190
RN	30.0093	6.04549		
LPN	29.3079	5.68541		
CNA	29.2683	6.75007		
Factor 2-Supervisory Concerns	10.6495	3.54194	3.925	.020*
RN	11.0206	3.93601		
LPN	10.7679	3.35314		
CNA	10.5010	3.63342		

Table 3 continued

Factors	Mean	S.D.	F	Sig.
Factor 3-Conditions of the Job	15.0430	3.99983	.131	.877
RN	15.0538	3.66245		
LPN	15.1298	3.71648		
CNA	15.012	4.18637		
Factor 4-Strain of Risk	9.4213	3.64782	3.067	.047*
RN	9.7801	3.22536		
LPN	9.1347	3.83447		
CNA	9.3998	3.83446		
Factor 5-Intrinsic Reward	14.4038	3.54356	.686	.504
RN	14.3025	3.38817		
LPN	14.2727	3.57520		
CNA	14.4722	3.57820		
Factor 6-Co-workers	7.1763	2.05136	2.179	.113
RN	1.3521	1.87208		
LPN	7.1854	1.89808		
CNA	7.1203	2.14502		
Factor 7-Respect	14.1052	3.36772	12.636	.000*
RN	14.7266	3.26324		
LPN	14.3258	3.20823		
CNA	13.8386	3.42150		
Factor 8-Staffing	6.4841	2.11397	4.216	.015*
RN	6.7254	1.87147		
LPN	6.5336	1.92500		
CNA	6.3976	2.22847		
Factor 9-Continuing Education	6.8417	2.27395	12.917	.000*
RN	6.6674	2.34724		
LPN	5.4347	2.22397		
CNA	7.0194	2.24806		
Factor 10-Financial Concerns	6.5722	2.61784	1.530	.217
RN	6.5597	2.38400		
LPN	6.7726	2.43838		
CNA	6.5140	2.73557		

Table 3 continued

Factors	Mean	S.D.	F	Sig.
Factor 11-Equipment/supplies	6.8729	2.18952	1.691	.185
RN	6.7964	2.06124		
LPN	6.7439	2.06338		
CNA	6.9365	2.26282		
Factor 12-Attitude Towards Work	6.2117	2.23092	2.858	.058
RN	5.9779	2.01897		
LPN	6.2244	2.11648		
CNA	6.2806	2.34490		
Factor 13-Economic Concerns	7.3433	2.28867	6.585	.001*
RN	7.0095	2.31387		
LPN	7.2738	2.26835		
CNA	7.4622	2.27801		

* Significant at < .05

The one-way ANOVA showed statistically significant differences among the groups in Factors 2 (supervisory concerns); Factor 4 (strain of risk); Factor 7 (respect); Factor 8 (staffing); Factor 9 (continuing education); and Factor 13 (economic concerns). These factors were significant at <.05. These results support the hypothesis that differences in job satisfaction exist among the groups and identifies which of the indicators have significance.

Differences were noted among the responses in Factor 2 (supervisory concerns); F= 3.925 with a significance of .020. When examining the summated means, the LPNs were more satisfied (Mean= 30.00; S.D.= 6.04) with items related to supervisors than were the CNAs (Mean= 29.31; S.D.= 6.75). The RNs were the most satisfied with supervision (Mean= 3.00; S.D.= 6.04).

Factor 4, strain of risk, showed differences among the three groups; F= 9.42 with a significance of .047. LPNs were the least satisfied with strain of risk (Mean= 9.13; S.D.= 3.83). The CNAs were more satisfied (Mean= 9.40; S.D.= 3.83) and RNs were the most satisfied (Mean= 0.78: S.D= 3.23).

Factor 7, respect, also revealed differences in the mean responses among the groups; F= 12.64 with a significance of .000. The CNAs were the least satisfied (Mean= 13.83; S.D.= 3.42). The LPNs were more satisfied (Mean= 14.33; S.D.= 3.21). The RNs were more satisfied than the other two groups (Mean= 14.73; S.D.= 3.26).

Differences among the groups were noted in Factor 8, staffing; F= 4.22 with a significance of .015. The CNAs were the least satisfied (Mean= 6.40; S.D= 2.23). The LPNs were more satisfied (Mean= 6.53; S.D.= 1.93) and the RNs were the most satisfied (Mean= 6.73; S.D.= 1.87).

Factor 9, continuing education, showed differences among the groups; F=12.91 with a significance of .000. LPNs were the least satisfied (Mean=5.43; S.D.= 2.22), the RNs were more satisfied (Mean= 6.67;S.D.= 2.35), and the CNAs were the most satisfied (Mean=7.02; S.D.= 2.25).

Additionally, Factor 13, economic concerns, revealed differences among the groups; F= 6.59 with a significance of .001. The RNs were the least satisfied (Mean=7.01; S.D.= 2.31), the LPNs were more satisfied (Mean= 7.27; S.D. = 2.27) and the CNAs were the most satisfied (Mean=7.46; S.D.= 2.28).

Tukey's HSD test was performed to examine all pairwise group differences in the factors. In addition to examining pairwise differences, Tukey's HSD controls for type I

error with an experimentwise error rate. Only those factors which were significant at the <.05 level were examined. Those factors which had significantly different responses among the RNs, LPNs, and CNAs, Factors 2, 4, 7, 8, 9, and 13. These findings support the hypothesis that differences in indicators of job satisfaction among the groups exist and identifies the indicators that are significant different (see Table 4).

To test the hypothesis that significant differences exist among the three groups, multiple comparisons were performed on the group differences on the factors that indicated significant differences in the responses. Differences in responses were identified between the RNs and the CNAs to Factor 2, supervisory concerns. The mean difference equaled .5196 with a significance of .020.

Significant differences in responses were noted between the RNs and the LPNs to Factor 4, strain of risk. The mean difference equaled .6454 with a significance of .038.

Factor 7, respect, indicated differences in the responses between the RNs and CNAs (the mean difference equaled .8880 with a significance of .000) and the LPNs and the CNAs with a mean difference of .4872 with a significance of .022.

Responses were significantly different between the RNs and the CNAs to Factor 8, staffing. The mean difference equaled .3278 with a significance of .012.

The RNs and the CNAs responded significantly differently to Factor 9, continuing education. The mean difference equaled -3520 with a significance of .012.

Differences in responses to Factor 13, economic concerns, were noted between the RNs and the LPNs. The mean difference equaled -.4526 with a significance of .001.

Table 4. Multiple Comparisons: Group Difference on Factors.

			Mean Difference	Std. Error	Sig.
Factor 2-Supervisor Concerns	RN	LPN	.2528	.23798	.538
		CNA	.5196*	.19326	.020
	LPN	RN	-.2528	.23798	.538
		CNA	.2668	.19126	.344
	CNA	RN	-.5196*	.19326	.020
		LPN	-.2668	.19126	
Factor 4-Strain of Risk	RN	LPN	.6454*	.26299	0.38
		CNA	.3803	.21248	.176
	LPN	RN	-.6454*	.26299	.038
		CNA	-.2651	.21264	.426
	CNA	RN	-.3803	.21348	.176
		LPN	.2651	.21264	.246
Factor 7-Respect	RN	LPN	.4008	.22720	.182
		CNA	.8880*	.18564	.000
	LPN	RN	-.4008	.22720	.182
		CNA	.4872*	.18338	.022
	CNA	RN	-.8880*	.18564	.000
		LPN	-.4872*	.18338	.022
Factor 8- Staffing	RN	LPN	.1918	.14210	.368
		CNA	.3278*	.11499	.012
	LPN	RN	-.1918	.14210	.368
		CNA	.1361	.11409	.458
	CNA	RN	-.3278*	.11499	.012
		LPN	-.1361	.11409	.458
Factor 9-Continuing Education	RN	LPN	2328	.15280	.280
		CNA	.3520*	.12398	.012
	LPN	RN	.2328	.15280	.280
		CNA	.5847*	.12280	.000
	CNA	RN	.3520*	.12398	.013
		LPN	.5847*	.12280	.000
Factor 13-Economic Concerns	RN	LPN	.2643	.15869	.219
		CNA	.4526*	.12698	.001
	LPN	RN	.2643	.15869	.219
		CNA	.1884	.12817	.306
	CNA	RN	.4526*	.12698	.001
		LPN	.1884	.12817	.306

* Indicates the mean difference is significant at < .05 level

To better understand the causes of the above factors to be significantly different among the RNs, LPNs, and CNAs, analysis of the responses to the individual items was necessary. To determine differences in responses from RNs, LPNs, and CNAs on individual items, one-way ANOVA was performed thereby testing the hypothesis that significant differences exist among the groups. Examining the differences among the groups not only provides an opportunity to show the responses of each group to individual items within the factors, it also identifies the variables used in the factor analysis. A second purpose of performing the one-way ANOVA is this a statistical procedure and factor analysis is a method of analysis. See Appendix F for Item Comparison.

As shown in Table 5, differences in the responses among the RNs, LPNs, and CNAs which were significant at the <.05 level were noted in the following items: urged by friends/family; earn a living; few job opportunities; undesirable hours; shift work; training requirements; loss of interest in LTC; poor management; health hazards; medial liability; size of staff; degree of autonomy; access to continuing education; quality of continuing education; time for co-worker interaction; supervisor's level of competence; professional respect from nurses; overall community environment for children; quality of schools; degree of community safety; and spouse's overall satisfaction.

Table 5. Significant Group Differences on Individual Items.

		Mean	S.D.	F	Sig.
Community Need		2.95	1.404	3.593	.028*
	RN	2.96	1.419		
	LPN	2.78	1.880		
	CNA	3.00	1.467		

Table 5 continued

		Mean	S.D.	F	Sig.
Urged by friends/family		2.27	1.436	11.651	.000*
	RN	2.14	1.370		
	LPN	2.02	1.041		
	CNA	2.37	1.356		
Earn a living		4.21	1.129	4.951	.007*
	RN	4.06	1.169		
	LPN	4.27	1.090		
	CNA	4.23	1.125		
Few job opportunities		3.13	1.615	6.719	.001*
	RN	2.95	1.303		
	LPN	3.00	1.629		
	CNA	3.23	1.599		
Undesirable hours		2.71	1.374	12.563	.000*
	RN	2.90	1.303		
	LPN	2.89	1.346		
	CNA	2.59	1.385		
Shift work		2.97	1.383	50.948	.000*
	RN	3.50	1.232		
	LPN	3.12	1.346		
	CNA	2.76	1.389		
Training requirements		2.15	1.188	3.687	.025*
	RN	2.11	1.031		
	LPN	2.02	1.074		
	CNA	2.20	1.261		
Poor management		2.93	1.428	4.275	.014*
	RN	2.76	1.304		
	LPN	2.90	1.364		
	CNA	2.99	1.479		
Health hazards		2.23	1.233	4.687	.009*
	RN	2.20	1.106		
	LPN	2.07	1.154		
	CNA	2.28	1.288		
Medical liability		2.16	1.191	10.194	.000*
	RN	2.03	1.073		
	LPN	2.00	1.091		
	CNA	2.26	1.246		
Loss of interest in LTC		3.03	1.344	4.235	.015*
	RN	2.86	1.275		
	LPN	3.09	1.292		
	CNA	3.07	1.377		

Table 5 continued

		Mean	S.D.	F	Sig.
Size of staff		3.22	1.205	3.505	.030*
	RN	3.35	1.098		
	LPN	3.15	1.154		
	CNA	3.21	1.249		
Number of others doing same job		3.26	1.178	8.432	.000*
	RN	3.38	1.083		
	LPN	3.39	1.048		
	CNA	3.18	1.234		
Degree of autonomy		3.56	1.024	11.074	.000*
	RN	3.76	1.226		
	LPN	3.58	1.177		
	CNA	3.50	1.049		
Access to continuing education		3.44	1.170	11.502	.000*
	RN	3.34	1.224		
	LPN	3.25	1.127		
	CNA	3.53	1.181		
Quality of continuing education		3.40	1.170	12.667	.000*
	RN	3.33	1.214		
	LPN	3.19	1.127		
	CNA	3.49	1.160		
Time for co-workers		3.26	1.125	3.564	.028*
	RN	2.23	1.056		
	LPN	3.15	1.111		
	CNA	3.70	1.147		
Supervisor's level of competency		3.62	1.268	8.705	.000*
	RN	3.79	1.135		
	LPN	3.91	1.116		
	CNA	3.54	1.245		
LTC related stress		2.97	1.162	3.348	.035*
	RN	2.85	1.111		
	LPN	2.95	1.124		
	CNA	3.02	1.187		
Professional respect from nurses		3.52	1.188	20.067	.000*
	RN	3.79	1.000		
	LPN	3.64	1.057		
	CNA	3.40	1.261		
Overall environment for children		3.71	1.106	15.073	.000*
	RN	3.94	1.033		
	LPN	3.78	1.045		
	CNA	3.62	1.134		

Table 5 continued

		Mean	S.D.	F	Sig.
Quality of schools		3.75	1.060	6.747	.001*
	RN	3.91	0.966		
	LPN	3.76	1.012		
	CNA	3.70	1.096		
Degree of safety in the community		3.99	0.925	12.514	.000*
	RN	4.17	0.809		
	LPN	4.02	0.863		
	CNA	3.93	0.968		
Spousal overall satisfaction with community		3.66	1.083	6.744	.001*
	RN	3.85	0.956		
	LPN	3.62	1.044		
	CNA	3.60	1.135		

* Indicates significance at < .05

Tukey's HSD test was performed to examine significant pairwise group differences and to identify the significance of the differences. Significant differences in responses were noted among the LPNs and the CNAs on the community need item. The LPNs were the least satisfied (Mean= 2.78; S.D.= 1.380). The RNs were more satisfied (Mean= 2.96; S.D.= 1.419) and the CNAs were the most satisfied (Mean= 3.00; S.D.= 1.46 7). Community need is one of the variables included in the intrinsic factor (Factor 5). The job of a CNA is usually routine, provide minimal autonomy, and do not require a high level of skill thereby resulting in CNAs being the least satisfied of the three groups with this item. Conversely, RNs have less routine, a greater degree of autonomy, and require a higher level of skill resulting in greater satisfaction.

The variable earn a living had differences among RNs, LPNs, and CNAs, however no differences were noted between only LPNs and CNAs. RNs were the least satisfied

with this item (Mean= 4.06; S.D.=1.169), the CNAs were more satisfied (Mean= 4.23; S.D.=1.125), and the LPNs were the most satisfied (Mean= 4.27; S.D.= 1.090).

The item few job opportunities in the area also showed differences among all three groups. RNs were the least satisfied (Mean 2.95: S.D.= 1.169), LPNs were more satisfied (Mean 3.00; S.D.= 1.629), and the CNAs were the most satisfied (Mean= 3.25; S.D.=1.599).

Differences in responses related to undesirable hours were noted among all three groups. The CNAs were the least satisfied with this item (Mean= 2.59; S.D.= 1.385). The LPNs were more satisfied (Mean=2.89; S.D.= 1.366), and the RNs were the most satisfied with hours (Mean=2.90; S.D.= 1.303). Shift work revealed differences among the responses of all three groups. The CNAs were the least satisfied (Mean=2.76; S.D.= 1.389), the LPNs were more satisfied (Mean=3.12; S.D.= 1.346), and the RNs were the most satisfied with this item (Mean=3.50; S.D.= 1.232).

Training requirements showed significant differences in the responses between the LPNs and the CNAs. The LPNs were the least satisfied with this item (Mean 2.02; S.D.= 1.07). The RNs were more satisfied (Mean= 2.11; S.D.= 1.031), and the CNAs were the most satisfied with training requirements (Mean= 2.02; S.D.= 1.661). One possible cause for the LPNs may be that they are often responsible for only giving medications. They usually do little patient care and have little autonomy. They may feel they are over educated for the tasks they are performing or not sufficiently challenged.

Significant differences were noted between the RNs and the CNAs regarding management. The RNs were the least satisfied with this item (Mean= 2.76; S.D.=1.304).

The LPNs were more satisfied (Mean= 2.90; S.D.=1.366) and the CNAs were the most satisfied with management (Mean=2.99; S.D.= 1.479).

Medical liability also showed significant differences among all three groups. The LPNs were the least satisfied with this item (Mean= 2.00; S.D.=1.091). The RNs were more satisfied (Mean=2.03; S.D.= 1.073), and the CNAs were the most satisfied with medical liability (Mean=2.26; S.D.=1.246).

Differences were also noted in loss of interest in long term care among all three groups. The RNs were the least satisfied with this item (Mean=2.86; S.D.= 1.275). The CNAs were more satisfied (Mean=3.07; S.D.= 1.377), and LPNs were the most satisfied with providing long term care (Mean= 3.09; S.D.= 1.292).

The RNs and LPNs responded significantly different regarding the size of the staff. The LPNs were the least satisfied with this item (Mean= 3.15; S.D.= 1.154). The CNAs were more satisfied (Mean= 3.21; S.D.= 1.249) and the RNs were the least satisfied with the size of the staff (Mean=3.35; S.D.= 1.098).

The number of others doing the same job revealed significant differences in the responses among all three groups. The CNAs were the least satisfied (Mean= 3.18; S.D.=1.234), the RNs were more satisfied (Mean=3.38; S.D.= 1.083), and the LPNs were the least satisfied (Mean=3.39; S.D.= 1.048).

All three groups had significant differences in their responses to the degree of responsibility. The CNAs were the least satisfied (Mean=3.50; S.D.= 1.181). The LPNs were more satisfied (Mean=3.58; S.D.= 0.966), and the RNs were the most satisfied with the degree of responsibility (Mean=3.76; S.D.= 0.973).

In addition, all three groups had significantly different responses to access to long term care continuing education. The LPNs were the least satisfied (Mean=3.25; S.D.= 1.177), the RNs were more satisfied (Mean= 3.34; S.D.=1.226), and the CNAs were the most satisfied with this item (Mean=3.53; S.D.=1.181).

This was also true for the quality of continuing education. The LPNs were the least satisfied (Mean=3.19; S.D.= 1.127), the RNs were more satisfied (Mean= 3.33; S.D.=1.214) , and CNAs were the most satisfied with the quality of continuing education (Mean= 3.49; S.D.= 1.160).

Time for co-workers revealed differences among the 3 groups. RNs were the least satisfied (Mean=3.79; S.D.=1.056), LPNs were more satisfied (Mean=3.15; S.D.=1.111), and CNAs the most satisfied (Mean=3.70; S.D.=1.147),

The CNAs responded significantly different to supervisor's level of competence than did the LPNs and RNs. The CNAs were the least satisfied (Mean= 3.54; S.D.= 1.245). The LPNs were more satisfied (Mean= 3.71; S.D.= 1.116) , and the RNs were the most satisfied with this item (Mean= 3.79; S.D.= 1.135).

The RNs and the CNAs responded differently to the level of stress related to long term care. The RNs were the least satisfied (Mean= 2.85; S.D.= 1.111), the LPNs were more satisfied (Mean= 2.95; S.D.= 1.124) and CNAs were the most satisfied (Mean= 3.02, S.D.= 1.197).

All three groups responded significantly different to professional respect from nurses. The CNAs were the least satisfied (Mean= 3.20; S.D.= 1.261), the RNs were

more satisfied (Mean= 3.79; S.D.= 1.057), and the LPNs were the most satisfied (Mean= 3.91; S.D.= 1.000).

The overall environment for children in the community revealed significant differences between the RNs and the CNAs. Least satisfied were the CNAs (Mean= 3.62; S.D.= 1.134), the LPNs indicated they were more satisfied (Mean= 3.78; S.D.= 1.045), and the RNs were the most satisfied (Mean= 3.94; S.D.=1.033).

Significant differences were noted in the responses between the RNs and the CNAs regarding the quality of schools. The CNAs were the least satisfied (Mean= 3.70; S.D.= 1.096), the LPNs were more satisfied (Mean= 3.76; S.D.= 1.012), and the RNs were the most satisfied (Mean= 3.91; S.D.= 0.966).

The RNs and the CNAs responded differently to the community's degree of safety. Least satisfied were the CNAs (Mean= 3.93; S.D.= 0.968), the LPNs responded to being more satisfied (Mean= 4.02; S.D.= 0.863), and the RNs were the most satisfied (Mean= 4.17; S.D.= 0.809).

All groups responded differently to spouse's degree of satisfaction with the community. The CNAs were the least satisfied (Mean= 3.60; S.D.=1.135), the LPNs were more satisfied (Mean=3.62; S.D.= 1.044), and the RNs were the most satisfied (Mean=3.85; S..D.=.0956). See Appendix G for the Multiple Comparison: Single Item Responses table.

Chapter V will discuss the findings, limitations, and prospective research considerations.

CHAPTER V

CONCLUSION

The analysis of the data collected in this study revealed several indicators of job satisfaction. These findings are similar to those factors identified as significant in previous studies found in the literature. Statistical differences in the responses to several indicators were noted among the RNs, LPNs, and CNAs and the significance of these indicators were measured. These findings support the hypothesis that differences exist in the indicators of job satisfaction among the three groups of long term health care givers and that some of the differences are significant at the <.05 level.

As discussed in Chapter II, previous studies, such as the study conducted by Kiyak et al. (1997) and Timmreck (2001), have supported the hypothesis that the level of job satisfaction is a predictor of turnover. Many of the indicators were applicable to all three groups of long term health givers, however, the data revealed differences in several indicators of job satisfaction among RNs, LPNs, and CNAs. It is important to identify these job satisfaction indicators because it allows the long term care administrator to better focus on specific areas of job satisfaction as indicated by the respondents in the study resulting in higher staff retention levels.

Variables associated with the community were the strongest factor in indicating job satisfaction with all three levels of long term health care givers. This supports the

findings of previous studies of other workers in a variety of settings. It is necessary for the administrator of long term care facilities to consider the importance of this factor when examining the issues of retention and recruitment. Employees desire a safe environment for children and quality schools. Although little can be done by the administrator alone, it is important to know the health care sector in a community does not exist in a vacuum and it is necessary for the administrator to be involved with and knowledgeable about other sectors in the community, such as education, economic development, local government, and the religious community.

This study revealed that supervisory concerns were the second strongest factor related to job satisfaction. This finding supports the importance of supervision as indicator of job satisfaction as described by Herzberg et al. (1959). The CNAs' responses indicated a lower level of job satisfaction with the supervisor's level of competence than did the RNs and LPNs. One limitation is the questionnaire did not identify the supervisor, such as the charge nurse, the director of nursing, or the administrator. Further investigation of the cause of dissatisfaction with the supervisor's competency may provide valuable information on improving the CNAs' level of job satisfaction thereby improving the retention of CNAs.

Intrinsic rewards was the fifth factor to be identified. All groups indicated being somewhat satisfied in helping others. This finding suggests that individuals work not only for pay but for some sense of internal satisfaction. Herzberg's motivation-hygiene theory (1959) describes the importance of internal/intrinsic factors in job satisfaction. For

the long term care administrator, it is important that health care givers have a sense of providing a positive contribution to the care of the residents.

The sixth factor identified as an indicator of job satisfaction related to co-workers. All three groups identified being satisfied with relationships with co-workers and the emotional support they receive. This supports theories identified in Chapter II (Duke, 1985; Lawler, 1973) describing the need for interpersonal communication between co-workers to promote a cohesive work group (individuals working together) which subsequently results in increased job satisfaction. Activities that allow for positive interpersonal interactions between co-workers may result in increased levels of job satisfaction.

Respect was the seventh factor identified in this study. All groups indicated being satisfied with professional respect from physicians, however, LPNs and CNAs indicated being dissatisfied with the professional respect from nurses. CNAs were the most dissatisfied. Herzberg et al. (1959) discussed the importance of being treated with respect by supervisors and/or by co-workers as an indicator of job satisfaction. Due to the importance of this indicator, further investigation would be warranted to understand the cause and possible solutions.

RNs indicated being more satisfied with the degree of responsibility and autonomy than did the LPNs and CNAs. Previous studies by Loher et al. (1995) have described the importance of autonomy in relationship to job satisfaction on health care givers.

Factors 8, 9, 10, 11, 12, and 13 had lower summated means, however, they are still noteworthy. Factor 8, staffing (size and number of others doing the same job), was responded to differently by RNs, LPNs, and CNAs. The CNAs were less satisfied than the RNs and LPNs with both the size and number of others doing the same job. Their dissatisfaction may reflect the view that they do not have adequate overall staffing or adequate CNA staffing. As discussed in Chapter I, many long term care facilities across the nation are experiencing a staff shortage.

Continuing education was the ninth factor identified. All groups were satisfied with the access and quality of continuing education, however, the RNs and LPNs were less satisfied than the CNAs. The opportunity for continuing education has been shown to be contributing factor to job satisfaction for those with higher education levels (Strauss, 1974). The administrator needs to be aware of the importance of personal and professional growth as it relates to job satisfaction.

The tenth factor was financial concerns: pay and benefits. All three groups responded to being satisfied with both. It is of interest that this was not identified as one of the most important factors. The literature addressing compensation and benefits seems somewhat contradictory. Anderson and Pullich (2000) described compensation and benefits comparable to those received by peers in other organizations as an important indicator of job satisfaction. This study would contradict Anderson and Pullich's findings, however, would support satisfaction theories described by Herzberg et al. (1959) that individuals seek more from their jobs than merely monetary gains (e.g., intrinsic rewards).

Adequate equipment was the eleventh factor identified. All groups were satisfied with the quality and quantity of the equipment. This relates back to the work environment and Herzberg's theory (1950) regarding the environment is non-contributory to job satisfaction unless the environment becomes a problem or is inadequate.

The final factor identified was attitudes toward work. RNs were less interested in providing long term care than were the LPNs and CNAs. RNs may lose interest as a result of the minimal amount of time they spend performing patient care. RNs are responsible for large amounts of paperwork, care plans, and other non-patient related activities that may result in a decreased interest in long term care.

Awareness of indicators of job satisfaction on the part of the long term care facility administrator provides an opportunity to focus on those items that employees view as satisfactory and those that may contribute to job dissatisfaction subsequently resulting in employee turnover. A number of those items associated with dissatisfaction may be improved upon internally. The high rate of turnover, especially the CNAs, may be reduced by further investigating those items such as professional respect from nurses. Unfortunately, not all items identified may be easily remedied by the administrator (i.e., size of the community, social opportunities in the communities).

It is of interest to note there were no responses of 1 (very dissatisfied) or 5 (very satisfied) on the completed questionnaires. It is possible the respondents could believe that their situation could be worse or that improvements can always be made. It is also possible the respondents are neither satisfied or dissatisfied with their job. This is an area that may be of interest to further investigate.

Several limitations may be associated with this study. One limitation is the results from this study may not be generalized to differences in job satisfaction among RNs, LPNs, and CNAs in other parts of the nation. Several factors may contribute to differences when replicating this study in other states. Medicaid and many of the staffing regulations (including the staff-patient ratio, amount of training necessary, and continuing education) are the responsibility of the state and may greatly vary from state to state. State administrated reimbursement programs may affect the ability of the long term care facility to provide adequate pay and benefits. In addition, local economic conditions affect availability of other job opportunities and compete with long term care facilities for entry-level employees by offering higher wages. The differences in the cultural environment among different regions of the country would make replication of this study difficult. Long term care facilities in North Dakota are unlike long term care facilities in large metropolitan areas. Large population areas have both private and public long term care facilities. Private facilities are affordable primarily to individuals of higher socioeconomic status unlike the public long term care facilities that are used by middle and lower class patients. The private facilities provide a more pleasant physical environment, a wider array of activities for clients, and are usually able to pay employees at a higher rate. Public long term care facilities are dependent on public reimbursement (i.e., Medicaid) resulting in a minimal to negative profit margin. Additionally, public facilities in large metropolitan areas have culturally and ethnically diverse residents and employees. Often language barriers are problematic. North Dakota has few strictly private long term care facilities. Most facilities accept both private and public pay

patients resulting in long term care facilities in North Dakota having a more socioeconomically diverse group of patients than facilities in large metropolitan areas. In addition, North Dakota has a more homogenous cultural and ethnic population resulting in commonalities between the patients and employees.

The unique rural characteristics, described in detail in Chapter IV, make replication of this study difficult. Rural in many states (such as those on the eastern seaboard) and rural in North Dakota are distinctly different. Examining the differences in job satisfaction between urban and rural long term health care givers in North Dakota is topic for future research. It would be necessary to identify the number of those living in rural areas but working in urban areas which this study did not address. It may be of interest, as it relates to job satisfaction, to look at if long term care workers who live and work in communities due to spouses' work, family ties, and/ or are engaged in farming/ranching and compare them to those who have chosen their community for other reasons. This would be of particular interest regarding those residing in rural and remote areas of North Dakota.

Another limitation of this study is that no differentiation was made between highly skilled long term care facilities and those providing less skilled care. Responses from individuals working in highly skilled facilities may be different from those working in those facilities which provide a lower level of skilled care. Additionally, the size of the facility was not examined as an indicator of job satisfaction. Respondents were not asked about the organizational structure of their facility.

The opportunity for advancement and its relationship to job satisfaction was not explored in this study. Previous studies have indicated that this in an important determinant in job satisfaction. Future exploration of differences between the long term health givers would be of benefit.

For long term care administrators to effectively compete in the health care giver job market, policymakers must consider and provide adequate reimbursement to these facilities to meet the continuing demand for high quality long term care. As consumers become more educated and increase in number, their demands cannot be ignored. Federal and state regulations must be structured not only to ensure safe care, they must be reasonable to implement and allow for reasonable compliance. Policymakers need to make funding available for individuals to enter health care professions and possibly provide incentives through loan repayment for those trained to work in long term care. This type of program would be similar to the programs offered through the National Health Service Corps. Several states have implemented a variety of incentive programs to enhance retention and recruitment of long term care givers, such as the wage pass-through (WPT). Under the WPT, states designate some portion of a reimbursement increase for one or more public funding source for long term care, such as Medicaid, state appropriations, or Older American Act Funds.

Nursing, as a profession, has a responsibility to project a more positive image of nursing as a career. Nurses need to expose and recruit students as young as elementary school age to the opportunities and rewards of working in the health care field.

As the job market for health care givers becomes tighter and more competitive, identifying those factors contributing to job satisfaction for all levels of health care givers is necessary for successful recruitment, and more importantly, retention of employees. Strategies allowing employees to experience intrinsic and extrinsic rewards are essential for providing high quality long term health care provision now and in the future.

APPENDIX A

2001 NORTH DAKOTA LONG-TERM CARE STAFF SURVEY

1. Name of Your LTC Facility: (Facility name) _____

2 .Town where primary LTC facility is located: _____

3. What is your primary position/title in LTC: (Check the one that most accurately reflects your position):

- ○ RN
- ○ LPN
- ○ Certified nurse aide (or assistant)
- ○ Orderly
- ○ Social Worker
- ○ Social work assistant
- ○ Physical therapist
- ○ Physical therapy assistant/aide
- ○ Occupational therapist
- ○ Occupational therapy assistant/aide
- ○ Activity staff
- ○ Restorative aid
- ○ Dietary staff
- ○ Other, Please list: _____

4. Which of the following duties do you typically carry out? (Check all that apply)

- ☐ Medical records
- ☐ Medical examinations
- ☐ Administering medications
- ☐ Administering medical treatments (IV, Catheter, etc.)
- ☐ Dietary functions
- ☐ Bathing
- ☐ Toileting
- ☐ Dressing
- ☐ Feeding
- ☐ Transferring
- ☐ Physical therapy
- ☐ Occupational therapy
- ☐ Activity functions
- ☐ Other Please list: _____

5. For your job in Long Term Care:

How long have you worked at your current job? _____ Years

How long have your worked in the LTC industry? _____ Years

Is this job your primary occupation? ○ Yes ○ No

How much are you paid (please give the amount either per hour or month - before taxes)

_____ per hour or _____ per month

Approximately how many hours per week do you work at this facility? _____ Hours

6. What benefits do you receive from this job? (Check all that apply)

- ☐ Life Insurance Coverage
- ☐ Health/Medical Insurance
- ☐ Dental Insurance
- ☐ Disability insurance
- ☐ Pension/Retirement contributions

- ☐ Uniforms
- ☐ Vacation, If yes, approximately how many days per year? _____
- ☐ Sick leave, If yes, approximately how many days per year? _____
- ☐ Continuing education
- ☐ Child care
- ☐ Other(s), Please list them: _____

7. How do you feel about your LTC-related hourly work schedule? (Check ONE)

- ○ Too many hours
- ○ Not enough hours
- ○ About the right number of hours

8. Please rank the degree to which each of the listed factors played a part in your decision to work in LTC:

	Not a Factor 1	2	3	4	Major Factor 5
Community need	○	○	○	○	○
Interest in LTC	○	○	○	○	○
Satisfaction in helping others	○	○	○	○	○
Urged by family/friends	○	○	○	○	○
Challenge of providing LTC	○	○	○	○	○
To earn a living	○	○	○	○	○
Relatively few job opportunities in the area	○	○	○	○	○
Others (please list): _____	○	○	○	○	○

9. How long do you expect to stay in your current job (approximate)? (check ONE)
If your answer is less than 5 years answer item 10, if your answer is 5 or more years, answer item 11.

- ○ less than a year
- ○ 1-2 years
- ○ 3-4 years
- ○ 5 or more years

10. If you answer to question 9 was less than 5 years, which of the following would you include as reasons for expecting to leave your job?

Reason	Not a Factor 1	2	3	4	Major Factor 5
Undesirable number of work hours	○	○	○	○	○
Shift work	○	○	○	○	○
Training requirements	○	○	○	○	○
Pay	○	○	○	○	○
Benefits	○	○	○	○	○
Working conditions	○	○	○	○	○
Psychological stress of LTC work	○	○	○	○	○

Physical demands of the work	○	○	○	○	○
Poor management/supervision	○	○	○	○	○
Overwork as result of short staffing	○	○	○	○	○
Health hazards	○	○	○	○	○
Medical liability concerns	○	○	○	○	○
Loss of interest in providing LTC	○	○	○	○	○
Personality conflict with LTC personnel	○	○	○	○	○
Retirement	○	○	○	○	○
Others (please list): _____	○	○	○	○	○

11. If you expect to stay in your job for 5 years or more, please answer this question. Why do you expect to stay?

	Not a Factor				Major Factor
Reason	1	2	3	4	5
Community need	○	○	○	○	○
Interest in providing LTC	○	○	○	○	○
Satisfaction in helping others	○	○	○	○	○
Influence from family/friends	○	○	○	○	○
Challenge of providing LTC	○	○	○	○	○
Shortage of LTC staff to take my place	○	○	○	○	○
I need the work/income	○	○	○	○	○
Good working conditions	○	○	○	○	○
Others (please list): _____	○	○	○	○	○

12. To what extent does your LTC facility have problems hiring individuals to perform your job?

No Difficulty				Great Difficulty
1	2	3	4	5
○	○	○	○	○

13. In your opinion, why are individuals not interested in working in a LTC facility?

	Not a Factor				Major Factor
Issue	1	2	3	4	5
Undesirable number of work hours	○	○	○	○	○
Shift work	○	○	○	○	○
Training requirements	○	○	○	○	○
Pay	○	○	○	○	○
Benefits	○	○	○	○	○
Working conditions	○	○	○	○	○
Psychological stress of LTC work	○	○	○	○	○
Physical demands of the work					

Poor management/supervision	○	○	○	○	○
Overwork as result of short staffing	○	○	○	○	○
Health hazards	○	○	○	○	○
Medical liability concerns	○	○	○	○	○
Others (please list):	○	○	○	○	○

14. To what extent does your facility have problems keeping individuals in their job?

No Difficulty				Great Difficulty
1	2	3	4	5
○	○	○	○	○

15. Think about the persons that have quit their job in the past 2-3 years. In your opinion, to what extent did the following issues play a role in their decision to quit?

Reason	Not a Factor 1	2	3	4	Major Factor 5
Undesirable number of work hours	○	○	○	○	○
Shift work	○	○	○	○	○
Training requirements	○	○	○	○	○
Pay	○	○	○	○	○
Benefits	○	○	○	○	○
Working conditions	○	○	○	○	○
Psychological stress of LTC work	○	○	○	○	○
Physical demands of the work	○	○	○	○	○
Poor management/supervision	○	○	○	○	○
Overwork as result of short staffing	○	○	○	○	○
Health hazards	○	○	○	○	○
Medical liability concerns	○	○	○	○	○
Loss of interest in providing LTC	○	○	○	○	○
Personality conflict with LTC personnel	○	○	○	○	○
Retirement	○	○	○	○	○
Others (please list):	○	○	○	○	○

LTC JOB SATISFACTION

16. Please rate your level of satisfaction regarding the following aspects in your LTC-related job/duties.

	Not Satisfied 1	2	3	4	Very Satisfied 5
Total size of your facilities staff	○	○	○	○	○

Number of others doing the same work as you	○	○	○	○	○
Quality of care provided by local LTC workers	○	○	○	○	○
Availability of physician support	○	○	○	○	○
Degree of responsibility/autonomy	○	○	○	○	○
Access to LTC continuing education	○	○	○	○	○
Quality of available LTC continuing education	○	○	○	○	○
Time for coworker interaction	○	○	○	○	○
Quantity of LTC equipment/supplies	○	○	○	○	○
Quality of LTC equipment/supplies	○	○	○	○	○
Close relationships with coworkers	○	○	○	○	○
Emotional support from coworkers	○	○	○	○	○
Supervisor's level of competence	○	○	○	○	○
Supervisor's leadership ability	○	○	○	○	○
Supervisor's availability for questions/problems	○	○	○	○	○
LTC-related level of stress	○	○	○	○	○
Amount of time off from LTC duties	○	○	○	○	○
Professional respect from physicians	○	○	○	○	○
Professional respect from nurses	○	○	○	○	○

COMMUNITY SATISFACTION

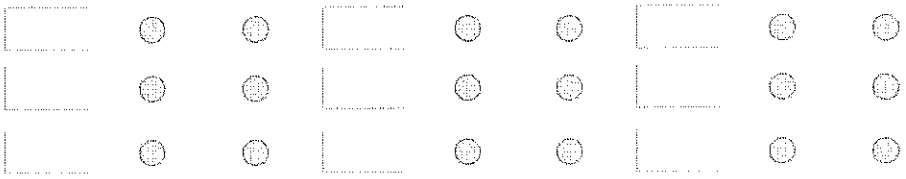
17. How satisfied are you with the following factors in your present community? Please rate each item from 1 to 5.

	Not Satisfied 1	2	3	4	Very Satisfied 5
Size of Community	○	○	○	○	○
Social/recreation opportunities	○	○	○	○	○
Overall environment for children	○	○	○	○	○
Quality of schools	○	○	○	○	○
Degree of safety	○	○	○	○	○
Health care system	○	○	○	○	○
Your overall community satisfaction	○	○	○	○	○
If *married*, spouse's overall community satisfaction	○	○	○	○	○

DEMOGRAPHICS

18. List the <u>age</u> and <u>gender</u> of the persons in your *household*:

	Age	Male	Female	Age	Male	Female	Age	Male	Female
Yourself:									



19. What is your highest level of educational attainment? (check ONE)

- Some grade/high school
- HS diploma/GED
- Associate Degree
- Bachelor's Degree
- Master's Degree
- Doctoral Degree

20. How long have YOU lived in your community? _____ Years

21. What is your current approximate gross (before tax) household income? (check ONE)

- $0-9,999
- $10,000-19,999
- $20,000-29,999
- $30,000-39,999
- $40,000-49,999
- $50,000-59,999
- $60,000-69,999
- $70,000-79,000
- $80,000-89,999
- $90,000-99,999
- $100,000 +

22. What is your racial/ethnic background? (check ONE)

- White, not of Hispanic origin
- Black, not of Hispanic origin
- Asian or Pacific Islander
- American Indian/Alaska Native
- Hispanic

23. What is your marital status? (check only ONE)

- Married
- Never married
- Divorced/Separated
- Widowed

24. If married, what is your spouse's occupational status: (check ONE)

- Full-time
- Part-time
- Retired
- Unemployed

25. If applicable, how supportive is your spouse/significant other of your role in local LTC care provision?

Very Unsupportive				Very Supportive
1	2	3	4	5
○	○	○	○	○

26. What, in your opinion, are the most important actions the North Dakota legislature can take to improve your capacity to provide quality long term care in the future? Please list the top two or three actions you would recommend.

Submit

THANK YOU FOR YOUR PARTICIPATION

APPENDIX B

North Dakota Long Term Care ASSOCIATION

(701) 222.0660 • *fax:* (701) 223.0977
1900 North 11th Street, Bismarck, ND 58501
email: shelly@ndltca.org • *web site:* www.ndltca.org
Shelly E. Peterson, *President*

April 23, 2002

Deb Moreno
PO Box 9037
Grand Forks, ND 58202

Dear Deb:

The purpose of this letter is to give permission and support to you, a UND doctoral student, to review and analyze the data collected from administrators and staff working in nursing facilities, basic care facilities and assisted living facilities.

This is a comprehensive study supported in the 2001 Legislative Session. Lawmakers, state agencies, consumers, and advocates are awaiting the results and we are all looking forward to the recommendations. Research and Statistics of the Department of Human Services is also reviewing and analyzing the same data and we urge both of you to work together on this project.

If you have any questions please don't hesitate to call.

Sincerely,

Shelly Peterson

Shelly Peterson, President
Long Term Care Association

Dave Skalsky

Dave Skalsky, LTC Alternative Services Admin.

SEP/pjm

An Affiliate of American Health Care Association

REPORT OF ACTION: EXEMPT/EXPEDITED REVIEW
University of North Dakota Institutional Review Board

Date: 8/6/02 **Project Number:** IRB-200208-019

Principal Investigator: Moreno, Deborah

Department: Political Science and Public Administration **College:** Rural Health

Project Title: Measurement of Job Satisfaction of Long Term Care Givers

The above referenced project was reviewed by a designated member for the University's Institutional Review Board on 8-8-02 and the following action was taken:

☐ Project approved. **Expedited Review** Category No. _____
Next scheduled review is on: _____

☐ **Copies of the attached consent form dated _____ must be used in obtaining consent for this study.**

☒ Project approved. **Exempt Review** Category No. 4
This approval is valid until August 2003 as long as approved procedures are followed. No periodic review scheduled unless so stated in the Remarks Section.

☐ Minor modifications required. The required corrections/additions should be submitted to OPRD for review and approval. **This study may NOT be started UNTIL final IRB approval has been received.**
(See Remarks Section for further information.)

☐ Project approval **deferred. This study may not be started UNTIL final IRB approval has been received.**
(See Remarks Section for further information.)

REMARKS: **Any adverse occurrences in the course of the research project must be reported immediately to the IRB Chairperson or ORPD.**

Any changes to protocol or Consent Forms must receive IRB approval prior to being implemented. You must submit a memo with a copy of the Consent Form and a revised Human Subjects Review Form, with the appropriate signatures, to the Office of Research and Program Development for review and approval.

PLEASE NOTE: **Requested revisions for student proposals MUST include adviser's signature. All revisions MUST be highlighted.**

☑ Education Requirements Completed. (Project cannot be started until IRB education requirements are met.

cc: John Williams

Signature of Designated IRB Member
UND's Institutional Review Board

If the proposed project (clinical medical) is to be part of a research activity funded by a Federal Agency, a special assurance statement or a completed 310 Form may be required. Contact ORPD to obtain the required documents.

(Revised 7/2001)

APPENDIX C

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	9.879	20.162	20.162
2	4.452	9.086	29.248
3	3.385	6.907	36.155
4	2.231	4.553	40.708
5	1.768	3.609	44.317
6	1.613	3.291	47.608
7	1.551	3.166	50.774
8	1.400	2.857	53.631
9	1.273	2.599	56.230
10	1.247	2.544	58.774
11	1.130	2.306	61.079
12	1.049	2.142	63.221
13	1.017	2.076	65.297
14	0.989	2.019	67.316
15	0.916	1.870	69.186
16	0.892	1.820	71.006
17	0.815	1.662	72.669
18	0.757	0.155	74.215
19	0.743	1.517	75.731
20	0.703	1.434	77.166
21	0.685	1.399	78.564
22	0.632	1.290	79.854
23	0.613	1.251	81.105
24	0.591	1.207	82.313
25	0.559	1.141	83.454
26	0.542	1.106	84.560
27	0.535	1.091	85.651
28	0.519	1.060	86.711
29	0.502	1.024	87.735
30	0.482	0.984	88.719
31	0.460	0.938	89.656
32	0.436	0.890	90.547
33	0.413	0.843	91.389
34	0.398	0.813	92.202
35	0.389	0.793	92.995
36	0.382	0.779	93.774
37	0.361	0.738	94.512
38	0.343	0.700	95.212
39	0.336	0.685	95.897
40	0.313	0.639	96.536
41	0.278	0.568	97.104
42	0.266	0.542	97.646
43	0.235	0.480	98.126
44	0.214	0.436	98.562
45	0.201	0.411	98.973
46	0.158	0.322	99.295
47	0.133	0.271	99.566
48	0.121	0.247	99.814
49	0.000	0.186	100.00

	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.879	20.162	20.162	4.687	9.556	9.564
2	4.452	9.086	29.248	3.285	6.705	16.269
3	3.385	6.907	36.155	3.123	6.373	22.642
4	2.231	4.553	40.881	2.881	5.879	28.521
5	1.768	3.609	44.317	2.319	4.734	33.266
6	1.161	3.291	47.608	2.293	4.680	37.935
7	1.551	3.166	50.774	2.205	4.499	42.434
8	1.400	2.857	53.631	2.170	4.429	46.864
9	1.273	2.599	56.230	2.128	4.343	51.207
10	1.247	2.544	58.774	1.960	4.001	55.208
11	1.130	2.306	61.079	1.842	3.760	58.967
12	1.049	2.142	63.221	1.589	3.244	62.211
13	1.017	2.076	65.297	1.512	3.086	65.297

APPENDIX D

Rotated Component Matrix

	Component												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Community need					0.578								0.106
Interest in LTC	0.121				0.818						0.114		
Satisfaction in helping others			0.163		0.704		0.112	0.140			0.149		
Urged by fam/friends				0.264	0.337				0.153				0.324
Challenge in providing LTC					0.750	0.123			0.131				
Earning a living													0.765
Few jobs available in area										0.136			0.803
Undesirable hours			0.332	0.479						0.348	0.117		
Shift work			0.370	0.511				0.112		0.272	0.138		
Training requirements			0.134	0.695						0.201			
Pay			0.271	0.107						0.804			
Benefits			0.155	0.248						0.811			
Working conditions			0.545	0.169						0.276		0.246	
Psychological stress			0.722	0.165								0.219	
Physical demands			0.759	0.183						0.128		0.156	
Poor management			0.282	0.210						0.245		0.311	
Overwork due to short staff			0.651	0.208						0.179			
Health hazards			0.195	0.766								0.172	
Medical liability			0.158	0.763								0.215	
Loss of interest			0.191	0.265								0.621	
Personality conflicts			0.232	0.136								0.696	
Retirement		0.134		0.418						0.308		0.251	0.103
Size of staff		0.184						0.746				0.113	
Number others doing same job		0.194				0.180		0.772					
Quality of care provided	0.224	0.202				0.147	0.184	0.495	0.174		0.188		0.166
Availability of MD support	0.191	0.112					0.705	0.235	0.158				
Degree of autonomy	0.164	0.170				0.190	0.422	0.475	0.188		0.149		

	Component												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Access to LTC con't. edu.	0.158	0.129					0.202		0.866		0.120		
Quality of LTC con't. edu.	0.132	0.156					0.183	0.131	0.864		0.148		
Time for co-worker interaction	0.149	0.190				0.424		0.185	0.395		0.212	0.172	
Quantity of LTC equipment	0.104	0.258				0.160	0.159	0.177	0.221		0.746		
Qaulity of LTC equipment	0.129	0.249				0.165	0.166	0.166	0.166		0.760		
Close relationship w/coworkers	0.127	0.127				0.879		0.113			0.116		
Emotional support from co-workers	0.162	0.216				0.840	0.183						
Supervisors level of competence	0.119	0.857				0.186	0.123	0.206	0.105				
Supervisor leadership ability	0.135	0.889				0.140	0.124	0.169	0.152		0.124		
Supervisor availability for problems	0.143	0.839				0.121	0.119	0.154	0.160		0.137		
LTC related level of stress		0.215				0.298	0.198	0.215	0.204	0.100		0.203	
Amt. time off from LTC duties	0.123	0.221				0.160	0.393	0.144	0.139		0.101	0.279	
Professional respect from MDs	0.125	0.118				0.131	0.787				0.109		
Professional respect from nurse	0.129	0.370				0.389	0.440	0.147					
Size of the community	0.653					0.103		0.147				0.134	
Soc/recreational opportunities	0.680				0.118								
Overall environment for children	0.792												
Quality of schools	0.773												
Degree of safety	0.685						0.210						
Health care system	0.607						0.298	0.138	0.110				
Overall community satisfaction	0.863												
Spouses overall satisfaction	0.756	0.128					0.138						

Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalization
a. Rotation converged in 11 rotations

APPENDIX E

Summated Means

	Statistics for Scale				Corrected Item-Total Correlation
	Mean	SD	Mean	SD	
Decision to work in LTC					
Factor 5: Intrinsic Reward (Alpha=0.6803)	14.4038	3.5436			
Community need			2.8975	1.4531	0.3816
Interest in LTC			3.8873	1.1420	0.5843
Satisfaction with helping others			4.3358	0.9544	0.4109
Challenge of LTC			3.2832	1.3505	0.5219
Factor 12: Economic Concern (Alpha=0.5292)	7.3433	2.2887			
Earn a living			4.2069	1.1207	0.3838
Few job opportunities			3.1364	1.6112	0.3838
Why others have quit their LTC					
Factor 3: Conditions of the job (Alpha=0.8072)	15.043	3.988			
Working conditions			3.4486	1.3250	0.5567
Psychological stress			3.8294	1.1967	0.6691
Physical stress/demands			3.9426	1.1886	0.6794
Overworked/short-staffed			3.8225	1.3087	0.5991
Factor 4: Strain of risk (Alpha=0.5935)	10.285	3.4224			
Shift work			2.9478	1.3784	0.3632
Training requirements			2.1149	1.1644	0.4378
Health hazards			2.0720	1.2147	0.4246
Medical liability			3.0151	1.3296	0.2880
Factor 13: Attitude toward work (Alpha=0.5756)	6.2117	2.2309			
Loss of interest in LTC			3.1979	1.3220	0.4041
Personality conflicts			3.0138	1.3405	0.4041
Factor 10: Financial concerns (Alpha=0.7899)	6.5722	2.6178			
Pay			3.5590	1.4174	0.6531
Benefits			3.0127	1.4620	0.6531
Community					
Factor 1: Community (Alpha=0.8808)	29.4385	6.3812			
Size of community			3.8426	1.0655	0.5645
Social opportunity			3.1493	1.2373	0.5952
Overall environment for children			3.7357	1.1155	0.6752
Quality of schools			3.7579	1.0566	0.6801
Degree of safety			4.0121	0.9266	0.6350
Health care system			3.4876	1.1687	0.5721
Community satisfaction			3.7814	0.9616	0.8192
Spousal satisfaction with community			3.6718	1.0777	0.6733
Your level of job satisfaction					
Factor 2: Supervisory concerns (Alpha=0.9340)	10.6495	3.5419			
Supervisor competency			3.6165	1.2046	0.8570
Supervisor leadership			3.5195	1.2659	0.9036
Supervisor availability			3.5815	1.2961	0.8335
Factor 6: Co-workers (Alpha=0.8707)	7.1763	2.0517			
Close relationship with co-workers			3.5816	1.0681	0.7717
Emotional support from co-workers			3.5947	1.1114	0.7717
Factor 7: Respect (Alpha=0.7565)	14.1052	3.3677			
Degree of responsibility/autonomy			3.5602	1.073	0.515
Physician support			3.5446	1.073	0.595
Respect from nurses			3.5217	1.178	0.512
Respect from physicians			3.4787	1.156	0.598
Factor 11: Equipment/Supplies (Alpha=0.9122)	6.8729	2.1895			
Quantity of equipment			3.3960	1.1477	0.8386
Quality of equipment			3.8729	2.1895	0.8386
Factor 9: Continuing education (Alpha=0.9202)	6.8417	2.2740			
Access to continuing education			3.4387	1.1921	0.8523
Quality of continuing education			3.4029	1.1707	0.8523
Factor 8: Staffing (Alpha=0.7369)	6.4841	2.114			
Size of staff			3.2249	1.2004	0.5835
Others doing the same job			3.2592	1.1753	0.5835

APPENDIX F

Group Differences on Individual Items.

		Mean	S.D.	F	Sig.
Community Need		2.95	1.404	3.593	.028*
	RN	2.96	1.419		
	LPN	2.78	1.880		
	CNA	3.00	1.467		
Interest in LTC		3.43	1.132	.849	.428
	RN	3.88	1.129		
	LPN	3.98	1.123		
	CNA	3.93	1.136		
Satisfaction with helping others		4.33	0.982	1.1202	.301
	RN	4.28	0.943		
	LPN	4.31	1.041		
	CNA	4.36	0.974		
Urged by friends/family		2.27	1.436	11.651	.000*
	RN	2.14	1.370		
	LPN	2.02	1.041		
	CNA	2.37	1.356		
Challenge of providing LTC		3.33	1.358	1.023	.360
	RN	3.25	1.333		
	LPN	3.31	1.387		
	CNA	3.35	1.356		
Earn a living		4.21	1.129	4.951	.007*
	RN	4.06	1.169		
	LPN	4.27	1.090		
	CNA	4.23	1.125		
Few job opportunities		3.13	1.615	6.719	.001*
	RN	2.95	1.303		
	LPN	3.00	1.629		
	CNA	3.23	1.599		
Undesirable hours		2.71	1.374	12.563	.000*
	RN	2.90	1.303		
	LPN	2.89	1.346		
	CNA	2.59	1.385		
Shift work		2.97	1.383	50.948	.000*
	RN	3.50	1.232		
	LPN	3.12	1.346		
	CNA	2.76	1.389		
Training requirements		2.15	1.188	3.687	.025*
	RN	2.11	1.031		
	LPN	2.02	1.074		
	CNA	2.20	1.261		

Table continued

		Mean	S.D.	F	Sig.
Pay		3.59	1.411	1.396	.248
	RN	3.59	1.304		
	LPN	3.70	1.312		
	CNA	3.57	1.520		
Benefits		3.02	1.464	4.71	.635
	RN	3.03	1.340		
	LPN	3.08	1.394		
	CNA	3.00	1.520		
Working conditions		3.47	1.328	.244	.635
	RN	3.45	1.232		
	LPN	3.43	1.304		
	CNA	3.48	1.364		
Psychological stress		3.85	1.194	1.526	.218
	RN	3.77	1.171		
	LPN	3.83	1.121		
	CNA	3.88	1.222		
Physical demands		3.96	1.180	0.28	.972
	RN	3.94	1.116		
	LPN	3.96	1.102		
	CNA	3.96	1.220		
Poor management		2.93	1.428	4.275	.014*
	RN	2.76	1.304		
	LPN	2.90	1.364		
	CNA	2.99	1.479		
Overwork due to short staff		3.83	1.306	4.275	.058
	RN	3.90	1.176		
	LPN	3.93	1.199		
	CNA	3.78	1.372		
Health hazards		2.23	1.233	4.687	.009*
	RN	2.20	1.106		
	LPN	2.07	1.154		
	CNA	2.28	1.288		
Medical liability		2.16	1.191	10.194	.000*
	RN	2.03	1.073		
	LPN	2.00	1.091		
	CNA	2.26	1.246		
Loss of interest in LTC		3.03	1.344	4.235	.015*
	RN	2.86	1.275		
	LPN	3.09	1.292		
	CNA	3.07	1.377		

Table continued

		Mean	S.D.	F	Sig.
Personality conflicts		3.23	1.326	1.854	.157
	RN	2.86	1.275		
	LPN	3.09	1.292		
	CNA	3.07	1.377		
Retirement		2.26	1.338	2.516	.081
	RN	2.30	1.284		
	LPN	2.12	1.276		
	CNA	2.28	1.372		
Size of staff		3.22	1.205	3.505	.030*
	RN	3.35	1.098		
	LPN	3.15	1.154		
	CNA	3.21	1.249		
Number of others doing same job		3.26	1.178	8.432	.000*
	RN	3.38	1.083		
	LPN	3.39	1.048		
	CNA	3.18	1.234		
Quality of care provided		3.71	1.092	2.993	.056
	RN	3.82	0.900		
	LPN	3.70	1.013		
	CNA	3.68	1.164		
Availability of physician support		3.55	1.078	2.366	.097
	RN	3.62	1.058		
	LPN	3.60	1.059		
	CNA	3.51	1.084		
Degree of autonomy		3.56	1.024	11.074	.000*
	RN	3.76	1.226		
	LPN	3.58	1.177		
	CNA	3.50	1.049		
Access to continuing education		3.44	1.170	11.502	.000*
	RN	3.34	1.224		
	LPN	3.25	1.127		
	CNA	3.53	1.181		
Quality of continuing education		3.40	1.170	12.667	.000*
	RN	3.33	1.214		
	LPN	3.19	1.127		
	CNA	3.49	1.160		
Time for co-workers		3.26	1.125	3.564	.028*
	RN	2.23	1.056		
	LPN	3.15	1.111		
	CNA	3.70	1.147		

Table continued

		Mean	S.D.	F	Sig.
Quantity of LTC equipment		3.40	1.147	1.577	.207
	RN	3.36	1.048		
	LPN	3.33	1.082		
	CNA	3.43	1.193		
Qaulity of LTC equipment		3.48	1.137	1.847	.158
	RN	3.43	1.099		
	LPN	3.41	1.065		
	CNA	3.51	1.169		
Close relationship with co-workers		3.58	1.074	1.659	.191
	RN	3.66	0.971		
	LPN	3.57	0.971		
	CNA	3.55	1.132		
Emotional support from co-workers		3.59	1.117	2.550	.078
	RN	3.69	1.027		
	LPN	3.62	1.040		
	CNA	3.55	1.163		
Supervisor's level of competency		3.62	1.268	8.705	.000*
	RN	3.79	1.135		
	LPN	3.91	1.116		
	CNA	3.54	1.245		
Supervisor's leadership ability		3.52	1.268	2.390	.092
	RN	3.63	1.222		
	LPN	3.53	1.198		
	CNA	3.48	1.300		
Supervisor's availability for problems		3.51	1.295	1.470	.230
	RN	3.60	1.275		
	LPN	3.54	1.255		
	CNA	3.48	1.313		
LTC related stress		2.97	1.162	3.348	.035*
	RN	2.85	1.111		
	LPN	2.95	1.124		
	CNA	3.02	1.187		
Amount of time off from LTC duties		3.34	1.171	2.166	.115
	RN	3.24	1.150		
	LPN	3.32	1.120		
	CNA	3.37	1.191		
Professional respect from physicians		3.48	1.154	2.571	.077
	RN	3.55	1.150		
	LPN	3.55	1.072		
	CNA	3.94	1.179		

Table continued

		Mean	S.D.	F	Sig.
Professional respect from nurses		3.52	1.188	20.067	.000*
	RN	3.79	1.000		
	LPN	3.64	1.057		
	CNA	3.40	1.261		
Size of community		3.83	1.062	1.382	.251
	RN	3.83	1.067		
	LPN	3.90	1.074		
	CNA	3.81	1.057		
Social/recreational opportunities		3.14	1.238	1.245	.288
	RN	3.19	1.221		
	LPN	3.19	1.184		
	CNA	3.11	1.258		
Overall environment for children		3.71	1.106	15.073	.000*
	RN	3.94	1.033		
	LPN	3.78	1.045		
	CNA	3.62	1.134		
Quality of schools		3.75	1.060	6.747	.001*
	RN	3.91	0.966		
	LPN	3.76	1.012		
	CNA	3.70	1.096		
Degree of safety in the community		3.99	0.925	12.514	.000*
	RN	4.17	0.809		
	LPN	4.02	0.863		
	CNA	3.93	0.968		
Health care system		3.50	1.151	1.351	.259
	RN	3.43	1.188		
	LPN	3.49	1.050		
	CNA	3.53	1.168		
Overall community satisfaction		3.77	0.854	1.276	.279
	RN	3.84	0.914		
	LPN	3.78	0.921		
	CNA	3.75	0.974		
Spousal overall satisfaction with community		3.66	1.083	6.744	.001*
	RN	3.85	0.956		
	LPN	3.62	1.044		
	CNA	3.60	1.135		

* Represents mean difference is significant at the < .05 level

Group Differences on Individual Items 2

		Sum of Squares	df	Mean Squares	F.	Sig.
Community need	Between Groups	15.377	2	7.689	3.593	.028*
	Within Groups	4906.558	2293	2.140		
	Total	4921.936	2295			
Interest in LTC	Between Groups	2.177	2	1.089	.849	.428
	Within Groups	3054.852	2383	1.282		
	Total	3057.030	2385			
Satisfaction with helping others	Between Groups	2.316	2	1.158	1.1202	.301
	Within Groups	2322.572	2411	.963		
	Total	2324.888	2413			
Urged by friends/ family	Between Groups	47.576	2	23.788	11.651	.000*
	Within Groups	4624.634	2265	2.042		
	Total	4672.210	2267			
Challenge of providing LTC	Between Groups	3.769	2	1.884	1.023	.360
	Within Groups	4212.756	2286	1.884		
	Total	4216.525	2288			
Earn a living	Between Groups	12.571	2	6.286	4.951	.007*
	Within Groups	3063.601	2413	1.270		
	Total	3076.172	2415			
Few job opportunities	Between Groups	34.873	2	17.436	6.719	.001*
	Within Groups	5939.738	2289	2.595		
	Total	5974.611	2291			
Undesirable hours	Between Groups	46.919	2	23.460	12.563	.000*
	Within Groups	3969.387	2126	1.867		
	Total	4016.756	2128			
Shift work	Between Groups	186.212	2	93.106	50.948	. 000*
	Within Groups	3928.229	2155	1.827		
	Total	4124.441				
Training Require-ments	Between Groups	10.372	2	5.186	3.687	.025*
	Within Groups	2969.691	2111	1.407		
	Total	2980.063	2113			

Table continued

		Sum of Squares	df	Mean Squares	F.	Sig.
Pay	Between Groups	5,555	2	2,778	1.396	.248
	Within Groups	4422.780	2222	1.990		
	Total	4428.335	2224			
Benefits	Between Groups	2.018	2	1.009	4.71	.625
	Within Group	4617.001	22154	2.143	.244	.783
	Total	4619.019	2156			
Working conditions	Between Groups	.862	2	.431	.244	.635
	Within Groups	4617.001	2154	21.143		
	Total	4619.019	2156			
Psychological stress	Between Groups	4.350	2	2.175	1.526	.218
	Within Groups	3157.735	2215	1.426		
	Total	3162.085	2217			
Physical demands	Between Groups	0.790	2	.040	0.28	.972
	Withing Groups	3105.443	2230	1.393		
	Total	3105.522	2232			
Poor management	Between Groups	17.379	2	8.690	4.275	.014*
	Within Groups	4388.508	2159	2.033		
	Total	4405.888	2161			
Overwork due to short staff	Between Groups	9.717	2	4.859	.4.275	.058
	Within Groups	3647.832	2142	1.703		
	Total	3657.550	2144			
Health hazards	Between Groups	28.671	2	7.095	4.687	.009*
	Within Groups	3115.539	2058	1.514		
	Total	3129.729	2060			
Medical liability	Between Groups	28.671	2	14.335	10.194	.000*
	Within Groups	2967.344	2110	1.406		
	Total	2996.015	2112			
Loss of interest in LTC	Between Groups	15.264	2	7.632	4.235	.015*
	Within Groups	3883.656	2155	1.802		
	Total	3839.920	2157			

Table continued

		Sum of Squares	df	Mean Squares	F.	Sig.
Personality conflicts	Between Groups	6.516	2	3.258	1.854	.157
	Within Groups	3812.812	2170	1.757		
	Total	3819.328	2172			
Retirement	Between Groups	9.002	2	4.501	2.516	.081
	Within Groups	3753.233	2098	1.789		
	Total	3762.235	2100			
Size of staff	Between Groups	10.165	2	5.082	3.505	.030*
	Within Groups	3491.992	2408	1.450		
	Total	3502.157	2410			
Number of others doing same job	Between Groups	23.244	2	11.622	8.432	.000*
	Within Groups	3263.869	2368	1.378		
	Total	3287.113	2370			
Quality of care provided	Between Groups	6.865	2	3.433	2.883	.056
	Within Groups	2852.466	2396	1.191		
	Total	2859.331	2398			
Availability of MD support	Between Groups	5.389	2	2.694	2.336	.097
	Within Groups	2714.192	2353	1.154		
	Total	2719.580	2355			
Degree of autonomy	Between Groups	23.029	2	11.515	11.074	.000*
	Within Groups	2433.053	2340	1.040		
	Total	2456.083	2342			
Access to continuing education	Between Groups	32.501	2	16.250	11.502	.000*
	Within Groups	3305.963	2340	1.413		
	Total	3338.464	2342			
Quality of continuing edu.	Between Groups	34.339	2	17.169	12.667	.000*
	Within Groups	3166.284	2336	1.355		
	Total	3200.622	2338			
Time for co-worker interaction	Between Groups	9.007	2	4.504	3.564	.028*
	Within Groups	2982.489	2360	1.264		
	Total	2991.496	2362			

Table continued

		Sum of Squares	df	Mean Squares	F.	Sig.
Quantity of LTC equipment	Between Groups	4.145	2	2.073	1.577	.207
	Within Groups	3114.527	2370	1.314		
	Total	3118.673	2372			
Quality of LTC equipment	Between Groups	4.774	2	2.387	1.847	.158
	Within Groups	3058.304	2363	1.292		
	Total	3058.078	2365			
Close relationship with co-workers	Between Groups	3.826	2	1.913	1.659	.191
	Within Groups	2739.531	2376	1.153		
	Total	2743.357	2378			
Emotional support from co-workers	Between Groups	6.350	2	3.175	2.550	.078
	Within Groups	2966.065	2382	1.245		
	Total	2972.415	2384			
Supervisor's level of competency	Between Groups	25.117	2	12.558	8.705	.000*
	Within Groups	3412.011	2365	1.443		
	Total	3437.128	2367			
Supervisor's leader-ship ability	Between Groups	7.673	2	3.836	2.390	.092
	Within Groups	3781.238	2356	1.605		
	Total	3788.911	2358			
Supervisor's avail-ability for problems	Between Groups	4.928	2	2.464	1.470	.230
	Within Groups	3950.453	2356	1.677		
	Total	3955.381	2358			
LTC related stress	Between Groups	9.027	2	4.513	3.348	.035*
	Within Groups	3145.328	2333	1.348		
	Total	3154.354	2335			
Amount of time off from LTC duties	Between Groups	5.932	2	2.966	2.166	.115
	Within Groups	3207.225	2342	1.369		
	Total	3213.157	2344			
Professional respect from MDs	Between Groups	6.838	2	3.419	2.571	.077
	Within Groups	3070.399	2309	1.333		
	Total	3077.237	2311			

Table continued

		Sum of Squares	df	Mean Squares	F.	Sig.
Professional respect from nurses	Between Groups	58.134	2	29.067	20.927	.000*
	Within Groups	3275.277	2358	1.389		
	Total	3333.411	2360			
Size of community	Between Groups	3.117	2	1.559	1.382	.251
	Within Groups	2697.378	2392	1.128		
	Total	2700.495	2394			
Social/recreational opportunities	Between Groups	3.811	2	1.906	1.245	.288
	Within Groups	3638.242	2376	1.531		
	Total	3642.053	2378			
Overall environment for children	Between Groups	36.427	2	18.213	15.073	.000*
	Within Groups	2850.422	2359	1.208		
	Total	2886.849	2361			
Quality of schools	Between Groups	15.097	2	7.549	6.747	.001*
	Within Groups	2636.868	2357	1.119		
	Total	2651.966	2359			
Degree of safety in the community	Between Groups	21.225	2	10.612	12.514	.000*
	Within Groups	2017.513	2357	.848		
	Total	2918.738	2381			
Health care system	Between Groups	3.578	2	1.789	1.351	.259
	Within Groups	3147.635	2378	1.324		
	Total	3151.212	2380			
Overall community satisfaction	Between Groups	2.321	2	1.161	1.276	.279
	Within Groups	2154.417	2367	.909		
	Total	2154.417	2369			
Spousal overall satisfaction	Between Groups	15.713	2	7.857	6.744	.001*
	Within Groups	1820.828	1563	1.165		
	Total	1836.542	1565			

*Results significant at <.05

APPENDIX G

Multiple Comparison: Single Item Responses

			Mean Difference	Std. Error	Sig.
Community Need	RN	LPN	-.18	.101	.177
		CNA	-.04	.081	.887
	LPN	RN	-.18	.101	.177
		CNA	-.22*	.081	.020
	CNA	RN	.04	.081	.887
		CNA	.22*	.081	.020
Urged by Friends/Family	RN	LPN	.12	.009	.422
		CNA	-.23*	.079	.011
	LPN	RN	-.12	.099	.422
		CNA	-.35*	.079	.000
	CNA	RN	.23*	.079	.011
		LPN	.35*	.079	.000
Earn a Living	RN	LPN	-.21*	0.76	.013
		CNA	-.17*	.061	.012
	LPN	RN	.21*	.076	.013
		CNA	.04*	.061	.788
	CNA	RN	.17*	.061	.012
		LPN	-.04	.061	.788
Few job opportunities in the area	RN	LPN	-.04*	.111	.923
		CNA	-.28*	.089	.006
	LPN	RN	.04	.111	.923
		CNA	-.23*	.089	.025
	CNA	RN	.28*	.089	.006
		CNA	.23*	.089	.025
Undesirable hours	RN	LPN	.01	.096	.989
		CNA	.31*	.078	.000
	LPN	RN	-.01	.096	.989
		CNA	.31*	.078	.000
	CNA	RN	-.31*	.078	.000
		LPN	-.30	.078	.000
Shift work	RN	LPN	.39*	.094	.000
		CNA	.74*	.076	.000
	LPN	RN	-.39*	.094	.000
		CNA	.36*	.760	.000
	CNA	RN	-.74*	.076	.000
		LPN	-.36*	.076	.000

Table continued

			Mean Difference	Std. Error	Sig.
Training Requirements	RN	LPN	.08	.084	.583
		CNA	-.09	.068	.358
	LPN	RN	-.08	.084	.583
		CNA	-.18*	.067	.025
	CNA	RN	.09	.068	.358
		LPN	.18*	.067	.025
Poor Management	RN	LPN	-.15	.099	.299
		CNA	-.23*	.081	.011
	LPN	RN	.15	.099	.299
		CNA	-.09	.080	.534
	CNA	RN	.23*	.081	.011
		LPN	.09	.080	.534
Health Hazard	RN	LPN	.13	.88	.288
		CNA	-.08	.071	.482
	LPN	CNA	-.13	.088	.288
		RN	-.21*	.071	.007
	CNA	RN	.08	.071	.482
		CNA	.21*	.071	.007
Medical Liability	RN	LPN	.03	.083	.908
		CNA	-.22*	.068	.003
	LPN	CNA	-.03*	.083	.908
		RN	-.26*	.067	.000
	CNA	RN	.22*	.068	.003
		LPN	.26*	.067	.000
Loss of Interest in LTC	RN	LPN	-.23*	.094	.034
		CNA	-.21*	.076	.018
	LPN	RN	.23*	.094	.034
		CNA	.03	.076	.032
	CNA	RN	.21*	.076	.018
		LPN	-.03*	.076	.932
Size of Staff	RN	LPN	.20*	.080	.034
		CNA	.15	.065	.062
	LPN	RN	-.20*	.080	.034*
		CNA	-.05	.064	.686
	CNA	RN	-.15	.065	.062
		LPN	.05	.064	.686

Table continued

			Mean Difference	Std. Error	Sig.
Number of others doing the same job	RN	LPN	-.01	.079	.996
		CNA	.20*	.064	.005
	LPN	RN	.01	.079	.996
		CNA	.21*	.063	.003
	CNA	RN	-.20*	.064	.005
		LPN	-.21*	.063	.003
Degree of autonomy	RN	LPN	.18*	.068	.019
		CNA	.26*	.055	.000
	LPN	RN	-.18*	.068	.019
		CNA	.08	.055	.352
	CNA	RN	-.26*	.055	.000
		LPN	-.08*	.055	.352
Access to LTC continuing education	RN	LPN	.09	.080	.495
		CNA	-.19*	.065	.010
	LPN	RN	-.09	.080	.495
		CNA	-.28*	.064	.000
	CNA	RN	.19*	.065	.010
		LPN	.19*	.064	.000
Quality of LTC continuing education	RN	LPN	.16	.078	.139
		CNA	-.16*	.064	.038
	LPN	RN	-.15	.078	.139
		CNA	-.30*	.063	.000
	CNA	RN	.16*	.064	.038
		LPN	.30*	.063	.000
Time for co-worker interaction	RN	LPN	.08	.075	.505
		CNA	-.07	.061	.455
	LPN	RN	-.08	.075	.505
		CNA	-.16*	.060	.025
	CNA	RN	.07	.061	.455
		LPN	.16*	.060	.025
Supervisor's level of competency	RN	LPN	.08	.080	.593
		CNA	.25*	.065	.000
	LPN	RN	-.08	.080	.593
		CNA	.17*	.065	.025
	CNA	RN	-.25*	.065	.000
		LPN	-.17*	.065	.025

Table continued

			Mean Difference	Std. Error	Sig.
LTC related level of stress	RN	LPN	-.10	.078	.409
		CNA	-.16*	.063	.029
	LPN	RN	.10	.078	.409
		CNA	-.06	.063	.579
	CNA	RN	.16*	.063	.029
		LPN	.06	.063	.579
Professional respect from nurses	RN	LPN	.15	.079	.152
		CNA	.38*	.064	.000
	LPN	RN	-.15	.079	.152
		CNA	.24*	.063	.001
	CNA	RN	-.38*	.064	.000
		LPN	-.24*	.063	.001
Overall environment for children	RN	LPN	.16	.074	.080
		CNA	.32*	.060	.000
	LPN	RN	.16	.074	.080
		CNA	-.16*	.059	.021
	CNA	RN	.32*	.060	.000
		LPN	-.16*	.059	.021
Quality of schools	RN	LPN	.15	.071	.089
		CNA	.21*	.058	.001
	LPN	RN	-.15	.071	.089
		CNA	.06	.057	.522
	CNA	RN	-.21*	.058	.001
		LPN	-.06	.057	.522
Degree of safety	RN	LPN	.16*	.062	.027
		CNA	.25*	.050	.000
	LPN	RN	-.16*	.062	.027
		CNA	.06	.057	.522
	CNA	RN	-.25*	.050	.000
		LPN	-.09	.049	.171
Spouse's overall satisfaction	RN	LPN	.23*	.083	.014
		CNA	.26*	.068	.001
	LPN	RN	-.23*	.083	.014
		CNA	-.23*	.069	.973
	CNA	RN	-.25*	.069	.001
		LPN	-.02	.069	.973

* Indicates the mean difference is significant at < .05 level

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