JOB SATISFACTION IN RURAL AND REMOTE NURSING: COMPARISON OF REGISTERED NURSES IN NURSE PRACTITIONER VS. NON-NURSE PRACTITIONER ROLES

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ABSTRACT

In Canada, the nursing shortage and high turnover rate of nurses are expected to worsen over the next ten years, making the recruitment and retention of nurses a priority for health care. Previous research has indicated that job satisfaction influences the recruitment and retention of nurses. Most of the research on job satisfaction, thus far, has focused on nurses practicing in urban, acute-care settings. There has been little research on job satisfaction of nurses practicing in rural and remote settings in Canada, and even less on nurses practicing in advanced nursing practice (ANP) roles, specifically nurse practitioner (NP) roles.

A secondary analysis of data from the national survey *The Nature of Nursing Practice in Rural and Remote Canada* was conducted with a group of 327 RNs practicing in NP roles and 1,151 RNs practicing in non-NP roles. The objectives of the present study were to describe similarities and differences between RNs in NP versus non-NP practice roles in rural and remote settings in Canada in relation to: (1) demographic profile, (2) job satisfaction, and (3) community satisfaction. The final objective of the study was to explore what the most important work-related attributes for RNs whose practice roles were categorized as NP.

A modified version of Stamp's (1997) Index of Work Satisfaction (IWS) was used to measure job satisfaction and the Community Satisfaction Scale (Henderson-Betkus & MacLeod, 2003) was used to operationalize community satisfaction. The study found that the reported overall level of job satisfaction was higher for RNs practicing in NP roles versus non-NP roles. Further findings suggested that the reported level of intrinsic job satisfaction factors was higher for RNs practicing in NP roles versus non-NP roles.

The themes that were identified during the content analysis of NPs' responses to the open-ended survey question related to the most important work-related attributes included: the nature of advanced nursing practice in rural and remote areas, work life, personal and professional development, practice philosophy, and the community. The findings of the present study provide useful information for health care administrators and policy makers on factors associated with job satisfaction of nurses practicing in NP and non-NP roles in rural and remote settings in Canada.

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CHAPTER ONE

INTRODUCTION

1.1 Introduction to the Problem

Job satisfaction is not a new concept within nursing. In 1965, Kim published one of the first articles on job satisfaction. By the late 1970's the literature on job satisfaction began to grow in response to a widespread shortage and high turnover rate of nurses. The nursing shortage and high turnover rate of nurses received much attention because of the significant impact it had on the health care delivery system. Recruitment and retention of nurses remain key issues, today, and this has resulted in further examination of job satisfaction of nurses. In previous research, a positive relationship has been observed between job satisfaction and the retention of nurses in acute care (i.e., hospital) settings in urban areas; however, these findings might not be easily transferred to other practice settings, such as rural and remote communities (Adams & Bond, 2000; Brief 1976; Price & Mueller 1981; Price 2002). Job satisfaction of nurses, therefore, needs to be studied in a broader context.

The association between job satisfaction and the retention of nurses has been well established (Cavanagh, 1990; Chen-Chung, Samuels, & Alexander, 2003; Hegney, 1996; Huntley, 1995; Irvine & Evans, 1995; Price & Mueller, 1981). Ineffective recruitment and retention strategies have resulted in a shortage of nurses, which has threatened the delivery of safe, quality nursing care (Hegney). Results of previous research suggest that issues of recruitment, retention, and job satisfaction of nurses have been cyclical in nature

and have a definite impact on the quality of the health care system (Hassmiller & Cozine, 2006; Hegney, 1996; Ma, Samuels, & Alexander, 2003).

Retention of registered nurses (RNs) is essential to the containment of health care expenditures, because high turnover rates are costly to the health care system (Irvine & Evan, 1995). One strategy that employers have used to retain nurses is to encourage professional growth and consideration of new roles such as the advanced nursing practice (ANP) role. The underlying assumption is that many nurses find the ANP role more satisfying than the typical staff nurse role (Koelbel, Fuller, & Misener, 1991). There is very little published research, however, on job satisfaction of nurses in ANP roles.

The ANP roles have been steadily evolving in Canada. A recent report published by the Canadian Nurses Association (2002a) outlined a detailed framework to promote integration and sustainability of one type of the ANP role, that is, the nurse practitioner (NP) role, in primary health care. The framework included chapters on legislation and regulation, practice, health human resources planning, education, change management, social marketing, and strategic communications (Canadian Nursing Association [CNA], 2002a). Results of previous research suggest that NPs deliver cost-effective health care, which has resulted in better patient outcomes when compared to care delivered by other primary care providers (Freund & Fox, 1999). In rural, urban, and under-served areas, use of NPs has resulted in increased access to primary care services (Freund & Fox).

1.2 Statement of the Problem

There has been little research on the job satisfaction of RNs practicing in NP roles. Even less is known about the job satisfaction of RNs practicing in NP roles in rural and remote settings and, particularly, in Canada.

1.3 Purpose of the Study

The purpose of this study was to describe similarities and differences between RNs whose practice roles in rural and remote Canada were categorized as NPs versus non-NPs, in relation to job satisfaction and variables related to the individual, the work environment, and the community.

1.4 Need for the Study

If NPs practicing in rural and remote settings are unsatisfied with their roles they are at risk of leaving their positions (Linn, 1975). If these nurses leave, who will be left to serve the people living in rural and remote Canada? Most importantly, how will this affect the quality of health care and what will the cost be to the health care system? Through research on job satisfaction of NPs, health care administrators and policy makers can learn valuable lessons that could positively affect the recruitment and retention of current and future nurses working in NP roles in rural and remote settings in Canada and elsewhere. The empirical ground work on job satisfaction of nurses that has already been carried out can be used as a foundation to be further built upon.

CHAPTER TWO

BACKGROUND

2.1 Conceptual Framework

2.1.1 Job Satisfaction of Rural Nurses:

Individual, Work Environment, and Community Predictors

The conceptual framework for the present study is based on a review of the literature. Information was drawn from the work of Hopkins (1983), Irvine and Evans (1995), Herzberg (1966), and Hegney (1996). Hopkins (1983), along with Irvine and Evans (1995), found that work content, work environment, and individual variables were important factors in predicting job satisfaction. Hegney's (1996) research indicated that the work role (i.e., work content) of rural nurses is highly dependent on the community (i.e., work environment) in which rural nurses are employed. The four components that make up the conceptual model for this study are the potential predictors: individual, work environment, community; and the outcome of the level of job satisfaction. Following is a discussion of the basis on which the four components were conceptualized.

In their meta-analysis of research on job satisfaction and turnover, Irvine and Evans (1995) found that stronger relationships existed among structural variables (i.e., work content and work environment), with respect to nurse job satisfaction, compared to the economic (i.e., pay, job market) and individual variables. The present study examined the individual, work environment, and community variables in relation to job satisfaction, specifically in rural and remote nursing roles (NP vs. non-NP roles). The

individual variables include the personal attributes employees bring to their jobs, which play an important part in how employees perceive their roles (Herzberg, 1966; Hopkins, 1983; Irvine & Evans, 1995), work environment (Herzberg; Hopkins; Irvine & Evans), and the community to which they belong (Hegney, 1996). Personal attributes include: age, gender, educational background, work setting (i.e., region and area of practice), and years of practice. The second major component of the conceptual framework is the work environment. The work environment includes job characteristics (i.e., job quality, responsibility, resources, attributes within the work setting, possibility of growth) and the job environment (i.e., supervision, working conditions, pay, promotion, interpersonal relationships), which are comprised of both intrinsic and extrinsic job-related factors (Herzberg, 1966; Hopkins, 1983).

The third component, community, was not part of the original works of Herzberg (1966), Hopkins (1983), or Irvine and Evans' (1995), presumably because the majority of job satisfaction research has been conducted in urban settings. The community variable was conceptualized based on the conclusions of Hegney's (1996) research on rural nursing, which indicated that the communities in which rural nurses live influences their perception of work life. Community variables include information on: (1) community satisfaction, (2) whether a family physician lives in the community in which the nurse works, and (3) whether the nurse has a support network of colleagues who provide consultation or professional support.

Herzberg's Motivation-Hygiene Theory (1966) states that interpersonal relationships, working conditions, and the effect one's job has on their personal life can lead to job dissatisfaction. In the rural context, these factors have a unique impact on

nurses compared to their urban counterparts. When living in a rural or remote community nurses are often seen as a resource person (Hegney, 1996). Frequently, nurses are recognized outside of work and when not working nurses are asked for professional advice (Hegney). Often in small towns people know one another and in many cases may even be related. Rural and remote nurses are expected to provide nursing care to people they may have a close relationship with (Hegney). Many rural and remote nurses have the tendency to work beyond their shifts because they feel they 'owe it' to the people in their community and often they are the only health care provider in area. The lack of anonymity may lead to nurses feeling like they are never off duty, but on the other hand it may make nurses feel like a valued member of the community (Hegney). The concept of community plays an integral role in the perceived level of job satisfaction of rural and remote nurses.

Job satisfaction is the final component of the proposed conceptual model. Job satisfaction was defined by Hopkins (1983) as, "the state of mind that results from the individual's needs or values being met by the job and its environment" (p. 32). It is hypothesized that relationships exist between employees' perceptions of their work and communities, and their individual attributes, which affect their perceived level of job satisfaction. Understanding of the relationships between these individual, work environment, and community variables and the level of job satisfaction of the rural and remote nurses in the present study will lead to recommendations on how to improve recruitment and retention strategies aimed at nurses practicing in NP and non-NP roles in rural and remote settings in Canada.

2.1.2 Herzberg's Motivation-Hygiene Theory

The conceptual underpinning that will be used to guide this investigation of job satisfaction of RNs practicing in NP roles versus non- NP roles is Herzberg's (1966) Motivation-Hygiene Theory of job satisfaction and motivation. Herzberg's theoretical framework has been applied in previous studies of job satisfaction of nurses in ANP and NP roles (Kacel, Miller & Norris, 2005; Koelbel et al., 1991; Miller, Apold, Bass, Berner & Levine-Brill, 2005; Misener & Cox, 2001).

The first study by Herzberg, Mausner, and Schneiderman (1959) was of job satisfaction of a sample of 200 engineers and accountants. The participants were interviewed and asked to recall events they had encountered at work that led them to feel a marked improvement or reduction in job satisfaction, and to reflect on why they felt this way (Herzberg et al., 1959). Participants were invited to explore whether feelings of satisfaction in regards to their work affected their performance, personal relationships, or well being (Herzberg et al.).

The study by Herzberg et al. (1959) was replicated by Herzberg (1966), who then studied a wider range of occupations to verify the original findings. With minimal revision to the theory, Herzberg (1966) identified six factors as determinants of job satisfaction: achievement, recognition, the work itself, responsibility, advancement and possibility of growth. These factors appeared very rarely when participants described events that brought about feelings of dissatisfaction (Herzberg, 1966). The major dissatisfiers were identified as: company policy and administration, supervision, salary, interpersonal relationships (i.e., superiors, peers, and subordinates), working conditions, status, job security and effects on personal life (Herzberg, 1966).

Herzberg (1966) proposed that "dissatisfier" factors describe the employee's relationships within the context in which he or she works while "satisfiers" address the situation in which the work is carried out. Herzberg (1966) concluded that "dissatisfier" and "satisfier" factors were independent of each other and observed that these dimensions were not opposite ends of the same continuum, but instead represented two distinct continua. In other words, when the factors that led to job satisfaction were absent, the workers were not necessarily dissatisfied with their work, they just lacked job satisfaction, and vice versa.

Because dissatisfiers essentially describe the environment in which one works and have little effect on positive job attitudes, Herzberg (1959) labeled these "hygiene factors" or extrinsic factors. Herzberg (1959) named the satisfier factors "motivators" or intrinsic factors because these factors play a role in motivating individuals to strive for superior performance. The results of Herzberg's work suggest that "the hygiene" or maintenance events lead to job dissatisfaction because of the need to avoid unpleasantness; the motivator events lead to job satisfaction because of the need for growth or self-actualization" (Herzberg, 1966, p. 75).

One might assume that the need to reach self actualization may influence a nurse to pursue a career as a NP. A nurse in this role may have a need for an increase in responsibility, career advancement, or an opportunity for personal growth. These factors are identified in Herzberg's (1966) Motivation-Hygiene Theory as key components of job satisfaction.

Herzberg's theory (1966) described how motivation differs between intrinsic and extrinsic factors. He used the term "movement" to describe the situations in which

people sought out to fulfill hygiene needs. Herzberg (1966) defined "motivation" as the situations in which people sought out to fulfill motivator needs. Most researchers today would refer to Herzberg's movement as extrinsic motivation or extrinsic rewards and Herzberg's motivation as intrinsic motivation or intrinsic rewards (Sachau, 2007).

Herzberg (1966) found that the participants felt positively towards intrinsic factors for a relatively long period of time and felt negatively about the extrinsic factors for a relatively short period of time. For the few participants who felt that extrinsic factors brought about feelings of happiness they stated that these feelings lasted a shorter period of time compared to the participants who experienced happiness that originated from intrinsic factors (Herzberg, 1966). One could conclude that extrinsic factors have the ability to produce feelings of happiness and enjoyment, but these feelings are most likely to be short lived (Sachau, 2007). Since the factors that lead to long-term happiness were found to be related to psychological growth and development, researchers seeking out the cause of happiness should examine intrinsic factors of job satisfaction.

2.2 A Critical Review of the Literature on Job Satisfaction

2.2.1 Recruitment and Retention of Nurses

Recruitment and retention of nurses is a concern in both urban and rural settings. The more remote the community, however, the more difficult it is to recruit and retain nurses in the area (Bushy, 2002). The current nursing shortage makes the recruitment of qualified nurses to rural areas even more difficult (Stratton, Dunkin, Juhl, & Geller, 1995). Lack of access to adequate support, education, and training have been identified as common factors that influence retention of rural nurses (Bushy, 2002; Hegney, 1996; Huntley, 1995; Lea & Cruickshank, 2005). Hegney (1996) found that rural health care facilities in Australia had lower turnover rates than urban health care facilities, which she attributed to the stability of the rural lifestyle. In addition, nurses were more likely to stay in their present position if they had a rural background, family connections with the community, or a partner who was working in the same area (Bushy; Hegney; Huntley).

The aging nursing workforce has led health care administrators to focus on the recruitment and retention of new graduate nurses to rural health care facilities (Cowin, 2002; Hegney, 1996; Lea & Cruickshank, 2005). Increasingly, the nursing curricula have incorporated rural practicum opportunities as a way to expose students to rural nursing (Bushy, 2002). In addition, tuition reimbursement is being offered to new graduate nurses as an incentive to practice in a rural setting (Bushy; Stratton, Dunkin, Juhl, & Geller, 1995). For nurses who are already practicing in rural areas the focus is on retaining nurses who have acquired the experience and knowledge it takes to be a rural nurse (Huntley, 1995).

It is important that there are adequate numbers of skilled nurses to ensure health care facilities are equipped to deliver safe, quality patient care. Job satisfaction is increasingly threatened as nurses are challenged to do more with fewer resources (Jackson, Mannix & Daly, 2001). Nurses' level of productivity continues to rise in response to increased demands in the workplace and the reduced number of nurses in the workforce (Jackson et al., 2001). Recruitment and retention of nurses has a direct impact on the level of job satisfaction experienced by nurses and, ultimately, the viability of the nursing profession (Hegney, McCarthy, Rogers-Clark, & Gormon, 2002).

2.2.2 Job Satisfaction of Nurses

2.2.2.1 Theory on Job Satisfaction

There has been extensive research on job satisfaction of nurses. Job satisfaction has been the most frequently studied variable in organizational behavior research (Spector, 1997). Job satisfaction has been defined as the feelings that employees have about their jobs and the extent to which they enjoy their jobs (Lu, While, & Barriball, 2005; Rakich, Longest, & Darr 1985). What makes a job satisfying or dissatisfying depends on the nature of the job and the individual's expectations of what his or her job should provide (Lu et al., 2005). Although there are many theories of satisfaction and motivation, Maslow's theory, Herzberg's Motivation-Hygiene Theory, and Vroom's Theory of Motivation have been applied, most commonly, in research on job satisfaction of nurses. Following is a review of theory on the concept of satisfaction.

Maslow's (1954) well known motivation theory suggests that human needs form a five-level hierarchy ranging from psychological needs, safety, belongingness and love, esteem, to self-actualization. Maslow's theory is that a person cannot recognize or

progress to the next higher level of need in the hierarchy until the current lower level need has been satisfied (Maslow, 1954). In Maslow's (1954) theory, satisfaction is an important variable, but only in relation to motivation. When a need is fulfilled or satisfied it is no longer a motivator, meaning that people are motivated by what they are seeking and not by what they already possess (Stamps, 1997). Maslow viewed dissatisfaction as a more powerful motivator than satisfaction (Stamps).

Herzberg, Mausner, and Schneiderman's (1959) Motivation-Hygiene Theory of Satisfaction and Motivation postulates that satisfaction and dissatisfaction represent two distinct continua. Herzberg (1966) defined motivators as factors intrinsic to the nature and experience of doing work: achievement, recognition, the work itself, responsibility, advancement, and the possibility of growth. These factors were found to be "satisfiers" (Herzberg, 1966). Hygiene factors were found to be "dissatisfiers" or extrinsic factors and include: company policy and administration, supervision, salary, interpersonal relationships (i.e., superiors, peers, and subordinates), working conditions, status, job security, and effects on personal life (Herzberg, 1966). Herzberg et al. (1959) suggested that a person can be both satisfied and dissatisfied with his or her job. Herzberg perceived satisfaction and motivation as arising mainly from the work, itself; whereas, Maslow perceived satisfaction as arising not just from the work itself, but from other aspects of one's life, as well (Stamps, 1997).

Another major theory that has been applied in previous research in regards to nurses' job satisfaction is Vroom's Theory of Motivation. Vroom's (1964) theory states that an individual's behavior is influenced by his or her perceptions of the expected benefits and outcomes of one's activities while taking into consideration the value of the

anticipated results (Juhl, Dunkin, Stratton, Geller & Ludtke, 1993). Valence, expectancy, and instrumentality are three variables within Vroom's (1964) theory. Valence is defined as the degree of importance an individual places on a particular outcome (Juhl et al., 1993). Expectancy refers to "a momentary belief concerning the likelihood that a particular act will be followed by a particular outcome" (Vroom, 1964, p. 17). Instrumentality is the perception that one's activities or behaviors will be rewarded (Juhl et al., 1993). Vroom's theory (1964) is that valence, expectancy, and instrumentality influence individuals to act in a way that produces the most desirable outcome for them. When comparing the works of Maslow and Vroom the distinction can be made that Maslow's theory describes the outcomes that motivate people, whereas Vroom's theory describes how individuals will act based on their expectations, experience, and values.

2.2.2.2 Factors Associated with Job Satisfaction of Nurses

As a result of the extensive previous research, several factors have been found to be associated with the level of job satisfaction of nurses. Most of the previous research, however, has focused on nurses working in acute care settings in the United States and Australia. Little research has focused on factors associated with job satisfaction of nurses practicing in ANP roles or factors associated with job satisfaction of nurses practicing in rural or remote settings. Thus far, there is a lack of published research on factors associated with job satisfaction of nurses practicing in ANP roles in rural or remote settings.

In a study of pediatric NPs in the United States, job setting, role acceptance, the clinical environment, relationships with other health care professionals, responsibility, and authority were identified as factors associated with job satisfaction (Bruhn, Bunce, &

Floyd, 1980). In addition, age, final grade in the NP training program, and degree of intolerance of ambiguity were found to contribute to job satisfaction (Bruhn et al., 1980). Younger nurses who achieved high grades in their training program and who were more tolerant of ambiguity were more satisfied with their jobs compared to older nurses who had lower grades and who were less tolerate of ambiguity (Bruhn et al.). In a study of nurses practicing in remote hospital settings in Australia, feedback, variety, cohesion amongst nurses, task identity, and collaboration with medical staff were identified as the strongest predictors of job satisfaction (Chaboyer, Williams, Corkill, & Creamer, 1999).

In a meta-analysis of research on job satisfaction, Blegen (1993) found that job satisfaction was strongly related to stress and organizational commitment and less so with communication with supervisors and peers, autonomy, recognition, routinization, fairness, and locus of control. In a meta-analysis of research on the relationships among job satisfaction, behavioral intentions, and nurse turnover, Irvine and Evans (1995) found a strong positive relationship between behavioral intentions and turnover with a weaker negative relationship between job satisfaction and turnover. In addition, the results suggested work content and work environment had a stronger relationship with job satisfaction than economic and individual variables. A more recent review of the literature on job satisfaction among nurses identified working conditions, interaction, work itself, remuneration, self growth, performance, praise and recognition, control, responsibility, job security, leadership style and organizational policies as sources of nurses' job satisfaction (Lu, While, & Barriball, 2005).

In a study of job satisfaction of nurses, patient satisfaction, nursing care delivery models, and organizational cultures in the United States, Kangas, Kee, and McKee

Waddle (1999) found no differences between the perceived level of job satisfaction of acute care nurses and the type of nursing care delivery model or organizational structure. The most important factor associated with job satisfaction was a supportive environment and working in a highly specialization area (Kangas, Kee, & McKee Waddle, 1999).

In the United States, Chen-Chung, Samuels, and Alexander (2003) found that the level of job satisfaction of nurses varied by years of service, job position, hospital retirement plan, and geographical location. Nurses with more than two years of experience were found to be less satisfied than those with less than two years of experience (Chen-Chung et al., 2003). Chen- Chung et al. (2003) explained that nurses with more experience tend to expect more autonomy, recognition, and opportunities within their jobs and when these factors are not met nurses become dissatisfied with their current jobs. Chen-Chung et al. observed an association between job satisfaction and job position. Nurses in the category of staff nurse, charge nurse, Clinical Nurse Specialist, or Nurse Manager were less satisfied than other nurses (i.e., home health nurse, school nurse, public health nurse). Positions without a clinical or hospital component were found to offer more flexibility and compensation and to be less stressful (Chen-Chung et al.). In addition, nurses practicing in small urban areas reported higher levels of job satisfaction compared to nurses practicing in large urban settings. Chen-Chung et al. (2003) attribute the difference in level of job satisfaction to differences between small and large urban centres in nurses' scope of practice, job structure, traveling time to work, culture, and interpersonal relationships with co-workers and supervisors.

In an analysis of data produced by RNs practicing in southern Michigan, who were invited to comment on factors associated with job satisfaction as part of a survey on

work-related stress, the most common themes identified were: patient care issues, nurse manager roles, salaries, benefits, trust, relationships with co-workers, rewards, patient satisfaction, and patient safety (Fletcher, 2001).

2.2.2.3 Measurement of Job Satisfaction

The job satisfaction of nurses is a complex phenomenon with many associating factors. Factors associated with job satisfaction of nurses have found to vary by geographical location, social context, and labor market (Lu, While, & Brriball, 2005). Several instruments have been developed and adapted to measure the relative importance of factors associated with job satisfaction and the effects of these factors have on the level of job satisfaction of nurses.

The majority of the instruments used to study nurses' job satisfaction have been developed in acute care settings. The three most commonly used instruments include: the McCloskey/Mueller Satisfaction Scale (Mueller & McCloskey, 1990), the Ward Organizational Features Scale (Adam, Bonds, & Arber, 1995), and the Index of Work Satisfaction (Stamps, 1997). Following is a brief description of these measurement tools.

The McCloskey/Mueller Satisfaction Scale (Mueller & McCloskey, 1990) consists of eight subscales of job satisfiers: (1) extrinsic rewards, (2) scheduling, (3) balancing family and work, (4) co-workers, (5) interaction, (6) professional opportunities, (7) praise and recognition, and (8) control and responsibility. The responses are rated on a 5-point Likert scale with 5 = very satisfied and 1 = very dissatisfied. The instrument was tested for reliability and validity on a group of nurses who were hired to work at a large mid-western hospital between June 1983 and September 1984 (Mueller & McCloskey). All of the nurses were invited to participate in

the study. Initially 350 nurses agreed to participate in the study. Data were collected at three points in time: shortly after the nurses were recruited, six months after being hired, and one year after being hired. The final sample included 190 nurses who responded to a 33-item survey at the six month timeframe. Data were used from the six month assessment with the rationale that the nurses would be settled in their jobs and their responses would reflect their perceptions of satisfaction with the work context. The Cronbach's alpha of the eight subscales ranged from .52-.80. Four of the subscales produced alphas of .70 or higher. The Cronbach's alpha for the global scale was .89. The test-retest correlations were generally lower than the Cronbach's alphas and ranged from .52 - .80. When the McCloskey/Mueller Satisfaction Scale was compared to several other established satisfaction scales and content-related validity ranged from .53 - .75. Construct validity testing was conducted by examining the correlations between the subscales of McCloskey/Mueller Satisfaction Scale and Sims, Szilagyi, and Keller's (1976) Job Characteristics Inventory (as cited in Mueller & McCloskey,1990) with Croncbach's alpha = .30 - .68.

In England, the Ward Organizational Feature Scale (WOFS) evolved in response to pressure on the nursing profession from management and government officials to demonstrate the effectiveness of nursing care and the contribution of nurses to high quality patient care (Adams, Bonds, & Arber, 1995). The instrument was developed to "facilitate understanding of the relationship between the physical and social aspects of nurses' work environment and relationships between systems of nursing care provision and nursing effectiveness" (Adams et al., 1995, p. 613). A nationally representative sample of 825 nurses, employed on 119 acute care wards in 17 of England's hospitals

was studied in the development and validation of the tool which measures organizational features of acute hospital wards. The Ward Organizational Feature Scale contains a set of six scales comprised of 14 subscales that measure the physical environment of the ward, professional nursing practice, ward leadership, professional working relationships, nurses' influence, and job satisfaction (Adams et al.). The factors are rated on a 4-point Likert scale (1 = strongly disagree/very bad/very difficult, 4 = strongly agree/very good/very easy). For each subscale the internal consistency was good ($r = \geq .7$). Criterion validity was assessed by comparing scale scores from two sources: nurses employed in six of the wards that were participating in the survey and the scores of a pair of independent assessors who completed a 'blind' observational assessment of ward characteristics. Similarities were found between the nurses' scores and the assessors' ratings. Thirty-three of 48 paired ratings were the same or differed by only one point of magnitude.

The Index of Work Satisfaction (IWS) was originally developed in 1972 and has undergone rigorous testing, analysis, and revision (Stamps, 1997). The IWS has been widely used to measure nurses' satisfaction and dissatisfaction, with the intent of identifying improvements that can be made to enhance nurses' work lives. In the past the IWS was used to study general, specialty, and public health nurses (Stamps; Best & Thurston, 2006).

The IWS is comprised of six job components: (1) autonomy, (2) professional status, (3) pay, (4) interaction, (5) task requirement, and (6) organizational policies (Stamps, 1997). The instrument is designed to measure two phenomena: nurse expectations (importance) and satisfaction (Stamps, 1997). The first part of the

questionnaire is designed to measure the relative importance of the six factors, using a set of 15 paired comparison statements. The second part of the questionnaire measures the current level of job satisfaction with each of the six components. The survey tool includes 44 items to which participants respond using a 7-point Likert scale, ranging from 'strongly disagree' to 'strongly agree.' The IWS will be discussed in further detail in section 3.5. Several other job satisfaction survey tools exist (i.e., Nolan, Nolan, & Grant 1995; Tzeng, 2003), but no information is available on the reliability and validity of these instruments.

A few instruments have been developed to study job satisfaction of nurses practicing in ANP roles, such as nurse midwives and NPs. Further research is need to support the reliability and validity of the following tools: Minnesota Satisfaction Questionnaire-Short Form (Weiss, 1967, as cited in Lu et al., 2005), Glasglow Midwifery Process Questionnaire (Turnbull, 1994), and the Advanced Practice Job Satisfaction Survey (Hameric & Taylor, 1989). There is published empirical evidence, however, on the credibility of the Misener Nurse Practitioner Job Satisfaction Scale (MNPJSS) (Misener & Cox, 2001).

The Misener Nurse Practitioner Job Satisfaction Scale draws heavily on the work of Mueller and McCloskey (1990) and was designed to study primary care NPs (Misener & Cox, 2001). The 44-item scale addresses the following factors: (1) intra-practice partnership, (2) challenge/autonomy, (3) professional, social, and community interaction, (4) professional growth, (5) time, and (6) benefits. Responses are indicated using a 6-point Likert scale (6 = 'very satisfied' to 1 = 'very dissatisfied') with a possible maximum score of 264 (Misener & Cox). The instrument was tested on a group of 342

NPs licensed by two state boards of nursing in the United States (Misener & Cox). Assessment of the internal consistency of the six factors (subscales) produced Cronbach's alpha reliability estimates of .79 or higher (Misener & Cox). So far the Misener Nurse Practitioner Job Satisfaction Scale has been used to measure job satisfaction of NPs in one previous published study (Kacel, Miller, & Norris 2005).

2.2.3 Job Satisfaction of Nurses Practicing in Rural or Remote Settings

The empirical literature is growing in the area of job satisfaction of nurses practicing in rural and remote settings. Most of the research, thus far, has focused on the relationship between job satisfaction, as an independent variable, and two dependent variables including: (1)stress and burnout (Andrews et al., 2005; Albion, Fogarty & Machin, 2005; Pinikahana & Happell, 2004) and (2) intentions to leave or stay (Dunkin, Juhl, & Stratton, 1996; Hegney, McCarthy, Rogers Clark, & Gorman, 2002; Henderson Betkus & MacCleod, 2004; Muus, Stratton, Dunkin, & Juhl, 1993; Pan, Dunkin, Muus, Harris, & Geller, 1995; Rambur, Palumbo, McIntosh, & Mongeon, 2003).

Research has been carried out in Australia**,** Canada, and the United States to explore the nature of nursing practice in rural and remote settings and what attracts nurses to work in rural and remote areas (Bushy, 2002). Findings of the previous research suggest that the level of job satisfaction varies by hospital size (Coward, Horne, Duncan, & Dwyer 1992; Penz 2006). Nurses practicing in various specialties in rural and remote settings have been studied including: public health (Best & Thurston, 2006; Dunkin, Juhl, Stratton, 1996; Henderson Betkus & MacLeod, 2004; Juhl, Duncan, Stratton, Geller, & Ludtke, 1993), home health (Juhl et al., 1993), long term care (Coward et al., 1995), and general duty (Dunkin et al., 1996; Muus, Stratton, Dunkin, & Juhl, 1993; Penz, 2006).

There is a lack of published research on the levels of job satisfaction of nurses in ANP roles practicing in rural and remote areas.

2.2.3.1. Stress and Burnout

A study examining the level of stress, burnout, and job satisfaction of Australian rural psychiatric nurses (n = 136) found that the majority of nurses were satisfied with their jobs (Pinikahana & Happell, 2004). Nurses were particularly satisfied with the level of support their received in their jobs and the level of involvement they had in the decision making process. The majority of the nurses in the study stated that they seldom thought of a finding a different job in nursing or in any other field (Pinikahana & Happell). A small proportion (10.4%) of the surveyed nurses reported "high" levels of burnout; however, a large percentage of nurses reported "low" emotional exhaustion (70.8%) and depersonalization scores (83.9%). The factors perceived to contribute most to stress included workload and nurses' feelings of being inadequately prepared to do their jobs.

A more recent Australian study compared organizational climate variables and psychological outcomes of a sample of nurses with "other" health care workers (n = 1,097) (Albion, Fogarty, & Machin, 2005). In the study, nurses reported having less favorable outcomes for the following organizational climate variables: (1) supportive leadership, (2) participative decision making, (3) role clarity, (4) professional interaction, (5) appraisal and recognition, (6) professional growth, (7) goal congruence, and (8) excessive work demands. The findings of the study suggest nurses had more strain and lower levels of morale, job satisfaction, and quality of work life than "other" health care workers. Nurses working in larger hospitals (with approximately 570 staff

members) and nurses working in mental health services reported even less favorable results when compared to nurses working in smaller hospitals (with approximately 50 staff members) and those who worked in other specialties.

A study designed to identify the predictors of job satisfaction of RNs working alone (n = 412) was explored by analyzing data collected from the national survey, *The Nature of Nursing Practice in Rural and Remote Canada* (Andrews et al., 2005). Findings identified the following factors to be significant predictors of job satisfaction: (1) face-to-face contact with colleagues, (2) greater decision latitude, and (3) lower psychological demands (Andrews et al.). Psychological demands include variables such as workload; therefore, heavy workloads were found to have a significant negative correlation to job satisfaction (Andrews et al.). Previous research supports that heavy workloads result in job strain, which has the potential to lead to stress and burnout (McGillis Hall, 2005).

2.2.3.2 Intentions to Leave or Stay

Muus, Stratton, Dunkin, and Juhl (1993) examined factors associated with job satisfaction of short-term employees (i.e., they intended to leave their current position in less than one year) and long-term employees (i.e., they planned to stay in their current position for five or more years) employed as RNs in rural community hospitals in the United States. Muus et al. found marked differences in demographic characteristics and some differences in factors associated with job satisfaction between the two groups of employees. Middle aged, married females were more likely to stay in their current position for five or more years. Nurses who grew up in communities of 50,000 or larger were more likely to be short-term employees and nurses who grew up in small rural

communities were more likely to be long-term employees. Long-term employees reported a higher level of community satisfaction compared to their short-term employee counterparts. Both groups reported being dissatisfied with (1) the pay scale, (2) the benefits, (3) the gap between administration and staff, (4) the amount of respect they received from doctors, and (5) the extent to which the agency rewarded advanced training and education. Dissatisfaction with the following five factors was prevalent only among the short-term employees: (1) the reasonability of earning potential, (2) the extent to which administrators consulted staff about daily problems, (3) the potential for advancement, (4) the amount of control over the number of hours worked, and (5) the amount of control in scheduling shifts.

A study of a sample of rural public health nurses (n = 124) in British Columbia, Canada, Henderson Betkus and MacLeod (2004) examined nurses' perceived levels of job satisfaction and community satisfaction, and their intent to stay in their current position. Public health nurses were found to be most dissatisfied with their salaries and were most satisfied with the following factors: (1) their professional status, (2) professional interactions, (3) the level of autonomy, (4) the friendliness of their community, and (5) the community's acceptance of their partner, and (6) their friends. Factors that influenced the public health nurses to leave their present position were age, retirement, family needs, and the economy. Job satisfaction was not found to play a role in the nurses' decisions to stay or leave their current positions.

Pan, Dunkin, Muus, Harris, and Geller (1995) examined the effects of individual and community factors on the retention of nurses in rural settings. The participants were grouped into four categories: (1) rural settings, as a whole; (2) hospital settings;

(3) skilled nursing facilities; and (4) community/public health facilities. For the group of rural nurses, as a whole, marital status, age, position, income, job satisfaction, and community satisfaction were found to be significant determinants of why nurses may consider leaving their current jobs. In all four groups, the two most significant factors that influenced nurses' decisions to leave or stay in the current job were job satisfaction and community satisfaction.

In another study, Rambur, Palumbo, McIntosh, and Mongeon (2003) examined a sample of Vermont nurses' (n = 4,418) intent to leave their current position. The reasons nurses considered leaving were grouped into three categories: career advancement, life situations, and job dissatisfaction. Intentions to leave varied by level of educational preparedness, hours worked per week, gender, practice role, and practice activity. Only the variables of educational preparedness and gender were found to be related to job dissatisfaction. Nurses' intent to leave due to job dissatisfaction was lower for nurses who had obtained a bachelor's degree and even lower for nurses who were prepared at the master's or doctoral level (Rambur et al.). Across all levels of educational preparedness, job dissatisfaction was the main reason participants intended to leave their jobs when compared to situational reasons, career advancement, and "other" variables. More men than women reported intending to leave their positions due to job dissatisfaction.

2.2.3.3. Why Nurses are Attracted to Rural or Remote Practice

There are many reasons why nurses prefer to work in a rural versus urban areas, including personal and professional factors (Dunkin, Juhl, & Stratton, 1996; Hegney, McCarthy, Rogers-Clark, & Gorman, 2002; Huntley, 1994), the types of clients (Hegney

et al., 2002), and the scope and context of nursing practice (Hegney et al., 2002). Because rural and urban nursing practice differ on many levels, it is important to identify why nurses choose to work in rural and remote settings (Hegney et al., 2002). In a previous study, Hegney et al. (2002) found that previous exposure to the rural or remote context, attraction to the rural lifestyle, and professional issues (i.e., job availability) were the three main reasons nurses were attracted to work in rural and remote areas in Australia. Several factors related to job satisfaction were identified by nurses in the study as important reasons to stay in rural practice. Nurses identified autonomy of their role (31%), the advanced nature of practice (27%), and the scope of practice (21%) as important incentives to stay in rural and remote areas. At the end of the questionnaire participants were invited to expand on the reason they had for working in rural and remote areas. Approximately 30% of the respondents identified job satisfaction variables such as variety/diversity, challenge, and autonomy, as factors that had attracted them to find employment in rural or remote areas.

In a similar study in the United States, Dunkin, Juhl, and Stratton (1996) found that the main reason nurses were attracted to rural and remote areas was job availability. Dunkin et al. (1996) reported that nurses who identified personal reasons as the main factor that would influence them to leave their current position were more likely to be satisfied with their jobs than those who identified professional reasons as the main factor that would influence them to leave their current position (Dunkin et al.).

In a study conducted in Australia, job satisfaction was identified as a major professional factor that nurses gave for seeking or staying in their present jobs (Huntley, 1995). Many of the nurses surveyed stated they enjoyed the challenge of working in an

extended role and of using a variety of nursing skills. Some nurses said they were gaining better experience and were able to develop their skills more quickly in the rural setting than if they had chosen to work in an urban hospital setting. The main personal reason nurses gave for why they were attracted to and decided to stay employed in a rural or remote area was the country life style and a preference for raising their children in a rural community. Many nurses in the study had grown up in rural areas and had family members in the area where they sought employment. In addition, participants stated they had high status in the rural community and they felt valued by community members. Factors associated with nurses wanting to leave their positions included the following job satisfaction variables: (1) interpersonal relationships, (2) administration, (3) working conditions, and (4) poor access to continuing professional education. Personal reasons nurses gave for leaving positions in rural or remote settings were education of their children and the high cost of sending children away to school (Huntley).

2.2.3.4. Level of Job Satisfaction and Hospital Size

Previous research suggests contradictory findings when the association between hospital size and nurses' perceptions of job satisfaction was examined. Coward et al. (1995) found no statistically significant differences between urban and rural nurses employed in long-term care facilities in respect to the overall level of job satisfaction or any of the five subscales (i.e., professional status, task requirement, autonomy, interactions with other nurses, and pay) of the Index of Work Satisfaction Scale. In the multiple variable analysis of the data, five factors were identified as predictors of the job satisfaction of long-term care nurses: (1) race, (2) personal income, (3) the employees' perception that their supervisor was interested in their career development, (4) the length

of time employees intended to stay at the time of hire, (5) and their current intent to leave (Coward et al., 1995). Early research published by Coward et al. (1992) reported that, with the exception of satisfaction with pay, nurses working in small rural hospitals have been found to have higher levels of job satisfaction than nurses working in large urban hospitals.

In a secondary analysis of *The Nature of Nursing Practice in Rural and Remote Canda*, Penz (2006) found that acute care nurses working in rural settings in Canada had a higher level of job satisfaction compared to acute care nurses working in small urban settings. Penz (2006) found that Canadian nurses who worked in small rural hospitals were more satisfied with the collaborative relationships that exist between doctors and nurses compared to nurses who worked in small urban hospitals. In addition, rural nurses in the study reported a higher level of nurse autonomy compared to their urban counterparts (Penz, 2006).

2.3 Advanced Nursing Practice

2.3.1 Advanced Nursing Practice in Canada

In Canada, the introduction of NPs began in the 1960s as a result of the changing role of the nurse, the physician shortage, and increasing specialization in health care (Canadian Institute for the Health Information/Canadian Nurse's Association [CIHI/CNA], 2005). The need for NPs was great at this time; however, little action was taken to formalize the role through legislation and regulation (CIHI/CNA, 2005). By the late 1970s, educational institutions were graduating NPs in Canada. Without the support of legislation, the only practice option for the NP graduates was to license as Registered Nurses and practice in a 'nurse practitioner-like' role (CIHI/CNA). Nurse practitioners

worked under the close supervision of physicians to deliver collaborative care (CIHI/CNA).

In the 1980s, initiatives to formalize the NP's role were put on hold primarily due to an over supply of physicians, lack of remuneration, the absence of provincial and territorial legislation, poor public awareness, and weak support of policy makers and health care professionals (CIHI/CNA, 2005). The renewal of the health care system in the 1990s, coupled with scarce resources and the need to develop primary health care principles led to the re-visitation of the idea of formalizing the NP role. Since the late 1990s, the provinces and territories have been responsible for regulation of the NP role.

In 2006, the Canadian Nurses Association (CNA) received 8.9 million dollars from the Health Canada Primary Health Care Transition Fund to implement the Canadian Nurse Practitioner Initiative (Canadian Nurse Practitioner Initiative [CNPI], 2006). The initiative's mandate includes five components: (1) legislation and regulation, (2) practice evaluation, (3) health human resources planning, education, and change management, (4) social marketing, and (5) strategic communication. The ultimate goal of the Canadian Nurse Practitioner Initiative is to "facilitate sustained integration of the NP role in the health care system to improve Canadians' access to health services" (CNPI, 2006, p. 1).

The Canadian Nurse Practitioner Initiative was formed in response to increasing pressure on the Canadian government to deliver timely access to quality health care services. Limited fiscal and human resources forced government to re-evaluate how health care is being delivered. Now, more than ever, Canadians are beginning to realize the need for nurses in a variety of roles, including ANP and NP roles, to work

collaboratively with health care professionals in other disciplines to deliver health care services in urban, rural, and remote areas.

2.3.2 Definitions of Advanced Nursing Practice (ANP) and Nurse Practitioner (NP)

The CNA (2002a) uses the words "advanced nursing practice (ANP)" as an umbrella term to identify RNs who are working in full scope and are using in-depth nursing knowledge and skills to deliver flexible and dynamic health care services to individuals, families, and communities. Registered nurses working in ANP roles are specialists who apply nursing theory, research, and clinical expertise to provide a wide range of services to meet the needs of their clients (CNA, 2003). They are found frequently in the clinical domain of nursing as Clinical Nurse Specialists (CNS) or Nurse Practitioners (NP), but they can also work within the domains of education, administration, and research (CNA, 2002a). However, there is a difference between the licensure and regulations of Clinical Nurse Specialists and NP. A NP works within an expanded role that requires separate legislation and regulations from that of an RN. The Clinical Nurse Specialist role falls within the RN scope of practice and is regulated by the RN association of each province and territory.

According to the CNA (2002b), there is no universal definition of NP; however, research suggests similarities in educational preparedness, licensure and regulation, scope of practice, and role functions. Nurse practitioners are educated at an advanced level and the majority are master's prepared (CNA, 2002b). In Canada, the basic educational requirement for an ANP is a graduate degree in nursing (CNA, 2003). All countries where NPs are employed have a formal system of licensure, regulations, certification, and credentialing; and all NPs are protected by government legislation (CNA, 2002b). The

NP's scope of practice includes the authority to prescribe medications and treatments, refer patients to other health care professionals, and admit patients to hospital (CNA, 2003). Nurse practitioners are a recognized point of contact for patients receiving a variety of diagnostic, treatment, preventative, and palliative care services (CNA, 2002b). Nurse practitioners are responsible for the management of their patient's conditions and they carry their own caseload (CNA, 2002b)

2.4. Review of Studies on Job Satisfaction of Nurses in ANP Roles Pre-analysis

2.4.1 Identification of the literature

Job satisfaction of nurses in ANP roles is the focus of the present study, specifically job satisfaction of NPs practicing in rural or remote settings in Canada. Empirical research on job satisfaction of rural and remote nurses in NP roles was identified through a search of all of the literature indexed in three electronic data bases: CINAHL (1982- 2007), Medline (1966- 2007), and PsycINFO (1806-2007).

To ensure inclusion of all relevant literature, the term job satisfaction was searched alone and in combination with: advanced practice nursing, advanced nursing practice, nurse practitioner, nurse midwife, nurse anesthetist, rural nurses, and remote nurses. The literature search yielded a total of 103 published research articles. The titles, abstracts, and full text of these articles were reviewed. Of the articles reviewed, seven specifically addressed job satisfaction of nurses practicing in ANP roles and were deemed to be of good quality, that is the methodology and analysis were clearly described. Reference lists of the seven selected research articles were reviewed to identify relevant literature that might not have been identified in the electronic search. Three additional articles (Beal, Steven, & Quinn, 1997; Bullough, 1974; Sullivan, Dachelet, Sultz, &

Henry, 1978) were identified by reviewing the reference lists of the seven articles. Detailed summaries of the identified 10 studies of job satisfaction of nurses practicing in NP roles are included in Appendix A.

2.4.2 Purpose

All 10 articles reported results of studies of work-related satisfaction of nurses in NP roles (Beal, Steven, & Quinn, 1997; Bullough, 1975; Kacel, Miller, & Norris, 2005; Koelbel, Fuller, & Misener, 1991; Linn, 1975; Miller, Apold, Baas, Berner, & Levine-Brill, 2005; Misener & Cox, 2001; Sidani, Irvine, DiCenso, 2000; Sullivan, Dachelet, Sultz, & Henry, 1978; Todd, Farquhar, & Camilleri-Ferrante, 1998). Five of the previous studies examined job satisfaction (Kacel et al., 2005; Koelbel et al., 1991; Miller et al., 2005; Misener & Cox, 2001; Todd et al., 1998) while the other five studies examined role satisfaction (Beal et al., 1997; Bullough; Linn; Sidani et al., 2000; Sullivan et al., 1978). Three studies examined job satisfaction (Linn) or role satisfaction (Bullough; Sullivan et al.) of nurses before, during, and after beginning educational training as NPs.

2.4.3 Characteristics of the Selected Studies

Four articles were published in the year 2000 or later (Kacel, Miller, & Norris, 2005; Miller, Apold, Baas, Berner, & Levine-Brill, 2005; Misener & Cox, 2001; Sidani, Irvine, DiCenso, 2000), three articles were published between 1991-1998 (Beal, Steven, & Quinn, 1997; Koelbel, Fuller, & Misener, 1991; Todd, Farquhar, & Camilleri-Ferrante, 1998), and three were published between the years 1974-1978 (Bullough, 1975; Linn, 1975; Sullivan, Dachelet, Sults, & Henry,1978). Eight studies were conducted in the United States (Beal et al., 1997; Bullough, 1975; Kacel et al., 2005; Koelbel et al., 1991; Linn, 1975; Miller et al., 2005; Misener & Cox, 2001; Sullivan et al., 1978), one study

was conducted in the United Kingdom (Todd et al., 1998), and one study was conducted in Canada (Sidani et al. 2000). The majority of participants in the studies by Kacel et al. (2005) and Sullivan et al. (1978) practiced in urban settings. Half of the participants in the study by Koelbel et al. (1991) practiced in urban settings while the other half practiced in rural settings. In the remaining seven studies, the researchers did not collect descriptive information on the communities in which the NPs worked (Beal et al.,1997; Bullough; Linn; Miller et al.; Misener & Cox; Todd et al.; Sidani et al.).

2.4.4 Data Collection and Analysis

In nine of the studies reviewed, surveys were used to gather the data (Beal, Steven, & Quinn, 1997; Bullough, 1974; Linn, 1975; Kacel, Miller, & Norris, 2005; Koelbel, Fuller, & Misener, 1991; Miller, Apold, Baas, Berner, & Levine-Brill, 2005; Misener & Cox, 2001; Todd, Farquhar, & Camilleri-Ferrante, 1998; Sidani, Irvine, & DiCenso, 2000). In five studies, the investigators used instruments that had been specifically designed to measure job satisfaction of nurses. The instruments used in the five studies were: the Misener Nurse Practitioner Job Satisfaction Scale (Kacel et al., 2005; Misener & Cox, 2001), the Index of Job Satisfaction (Koelbel et al., 1991), the Minnesota Satisfaction Questionnaire-Short Form (Koelbel et al.), the Glasglow Midwifery Process Questionnaire (Todd et al., 1998), and the Advanced Practice Job Satisfaction Scale (Beal et al., 1997). In the remaining four studies, the researchers developed new survey tools (Bullough; Linn; Miller et al., 2005; Sidani et al.; 2000). The study conducted by Sullivan, Dachelet, Sultz, and Henry (1978) was a secondary analysis of data from a national longitudinal-cohort study of NP's in the United States, which was originally conducted in 1976 by Sultz et al. Sullivan et al. (1978) failed to

explain the original method of data collection in their publication. In all 10 studies, statistical analysis was used to analyze the data. Beal, Steven, and Quinn (1997) used a mixed-method design and content analysis to analyze qualitative data collected using open ended questions included in the self-report questionnaire.

2.4.5 Study Design

The study designs used in the previous 10 studies included: the descriptive-correlation design using cross sectional survey (Kacel, Miller, & Norris 2005; Koelbel, Fuller, & Misener, 1991; Misener & Cox; 2001), the descriptive cross-sectional design (Beal, Steven, & Quinn, 1997; Miller, Apold, Baas, Berner, & Levine-Brill, 2005; Sidani, Irvine, & DiCenso, 2000; Sullivan, Dachelet, Sultz, & Henry, 1978; Todd, Farquhar, Camilleri-Ferrante, 1998), and the descriptive longitudinal design (Bullough, 1974; Linn 1975).

Three of the studies compared the level of job satisfaction or role satisfaction between different groupings of nurses (Bullough, 1974; Sullivan, Dachelet, Sultz, & Henry, 1978; Todd, Farquhar, Camilleri-Ferrante, 1998). Sullivan et al. (1978) examined role satisfaction of rural and urban NPs. Todd et al. (1998) examined differences in the level of job satisfaction between midwives who practiced in community settings and midwives who practiced in acute care settings. Bullough (1974) investigated job satisfaction of nurse practitioners, extended role nurses, and other nurses to determine whether nurses were less happy in their traditional roles.

2.4.6 Variables

Data on the demographic characteristics of the participants were collected in all but two studies (Bullough, 1975; Linn 1974). The eight publications included

information on personal and work attributes of the sample of participants being studied (Beal, Steven, & Quinn, 1997; Kacel, Miller, & Norris 2005; Koelbel, Fuller, & Misener, 1991; Miller, Apold, Baas, Berner, & Levine-Brill, 2005; Misener & Cox, 2001; Sidani, Irvine, & DiCenso, 2000; Sullivan, Dachelet, Sultz, & Henry, 1978; Todd, Farquhar, Camilleri-Ferrante, 1998). The following data were gathered to describe the personal characteristics of the sample: gender (Kacel et al. 2005; Koelbel et al., 1991; Miller et al., 2005; Misener & Cox; Sidani et al., 2000; Sullivan et al.. 1978; Todd et al., 1998), age (Beal et al.; Koelbel et al.; Misener & Cox; Sidani et al.; Sullivan et al.; Todd et al.), race (Koelbel et al.; Misener & Cox; Sullivan et al.), marital status (Koelbel et al.; Sidani et al.; Sullivan et al.; Todd et al.), number of children (Koelbel et al.; Todd et al.), and educational preparedness (Beal et al.; Kacel et al.; Koelbel et al.; Sidani et al.; Sullivan et al.; Todd et al.). Information on work-related characteristics included: the number of years since graduation (Miller et al.), salary (Kacel et al.; Koelbel et al.), experience (Beal et al.; Kacel et al.; Koelbel et al.; Todd et al.), the number of years worked (Miller et al.), the number of years worked at current job (Sidani et al.), the number of years worked as an NP (Miller et al.), the average number of years worked before becoming an NP (Sidani et al.; Sullivan et al.), hours worked (Beal et al.; Kacel et al.), the number of current work settings (Kacel et al.; Sidani et al.), work setting (Sidani et al.; Koebel et al.), specialty (Koelbel et al.; Miller et al.; Sullivan et al.;), and community setting (Kacel et al.; Koelbel et al.; Sullivan et al.).

Miller, Apold, Baas, Berner, and Levine-Brill (2005) studied 207 NPs who were mostly female (95.1%), with an average of 8 years since graduation. The average number of years worked was 7.46 years with a range of 0 (new grad) to 30 years of

practice. The reported average of years that the participants held certification was 7.03 years. The majority of NPs within the sample were family nurse practitioners (51.7%) with the next highest specialty group being "other" (20.5%). Within the "other" category, NPs identified as being adult, psychiatric, neurological, infectious disease, school, or occupational health NPs. Standard deviations were not reported for the means.

Of the 147 participants in the study by Kacel, Miller, and Norris (2005), the majority were women (97.9%), master's prepared (85%), and practiced in urban or suburban settings (70.3%). A large percentage of the NPs had 2-15 years of experience (87.8%) and worked 30, 40, or more hours per week (89.1%). More than half of the participants worked at one practice site (56.1%) and earned between $40,000 and $79,000 annually (61.5%). Approximately 48% of the NPs in the study reported having contracts.

A sample of 132 NPs was studied by Koelbel, Fuller, and Misener (1991). Approximately 90% of the sample reported being Caucasian. Most of the participants (65.9%) were married and less than half (42%) reported having either one or two children. Participants' ages ranged from 26 to 63 years [mean = 42.3 years, standard deviation (*SD*) = 8.4 years]. The majority of the NPs graduated from certificate programs (72.5%) and approximately 28% were master's prepared (Koelbel et al.). A large percentage of the NPs (72.5%) held national certification in their specialty. Nearly half of the participants (44%) practiced in general primary care settings including, adult, pediatric, and family practices. The remaining NPs specialized in geriatrics, neonatal, midwifery, and surgery. Eight percent of the NPs reported being employed in institutional settings. Half of these practice settings were located in urban areas and

57.9% of the NPs identified that at least 70% of their clientele were indigent. The annual salary of the NPs most frequently ranged from $25,000 to $29,999 (39%) with a few NPs earning more than $35,000 (9%) or less than $19,999 (8%). The number of years of experience ranged from 0.92 to 30 years (mean = 8.9 years, *SD* = 4.9 years).

Misener and Cox's (2001) sample consisted of 342 NPs. The average age of the participants was 43.6 years (*SD* = 8.0 years). The majority of NPs were female (98%) and identified their racial or ethnic background as Caucasian (93%). No further demographic data were gathered in the study.

Eighty midwives participated in the study conducted by Todd, Farquhar, and Camilleri-Ferrante (1998). Fifty of the participants were community midwives and the other 30 participants were hospital midwives. All participants were female. Hospital midwives were older (mean = 41.1 years, range: 27-58 years) than community midwives (mean = 35.3 years, range: 24-59 years). Hospital midwives were more likely to be married (90%) and have children (90%) compared to community midwives (68% and 42%, respectively). The median number of years of practice was greater for hospital midwives (median = 15.3 years, range: 2.75-32.1 years) than community midwives (median = 7.5 years, range: .5-24.5 years). Hospital midwives reported being at their present post for a longer period of time (median = 5.17 years, range: .83-17.0 years) than community midwives (median = 1.08 years, range: .08-22.25 years). While hospital and community midwives did not differ in terms of general training and midwifery qualification, community midwives did obtain further midwifery qualifications (26%) compared to hospital midwives (7%). Even though community midwives had further

educational training, hospital midwives were more likely to be employed at a senior grade (47%) as compared to community midwives (28%).

In the study by Sulivan, Dachelet, Sultz, and Henry (1978) a cohort of 1,099 NPs were surveyed. Of the participants, 525 answered the question on practice location. The majority of the participants reported working in an urban setting (84%) and 16% reported practicing in rural settings. For the 440 urban NPs, practice settings included: inner city, "other" urban, suburban, military, industrial, college, hospital, and Indian reservations. The modal age in both groups was 25-34 years, which comprised 50% of the NPs in the study. The majority of the participants (97%) were female and over 95% stated they were Caucasian. Rural NPs were more likely to be unmarried (52%) when compared to urban NPs (44%). A greater percentage of rural NPs (91%) had attended certificate programs than urban NPs (76%). The remaining NPs in both rural and urban groups had obtained master's degrees. Forty-seven percent of rural NPs had earned a baccalaureate or master's degree prior to their NP training. The other 53% obtained hospital diplomas in nursing or an associate degree. The average number of years employed in nursing was less than 10 years and did not vary by setting.

In the study by Sulivan, Dachelet, Sultz, and Henry (1978), 99% of the rural NPs reported providing primary care services. There was a higher percentage of family NPs in the rural setting compared to those in urban settings. Regardless of the rural NP's specialty 92% conducted health assessments, 93% provided care for physical illnesses, 81% provided care for mental and emotional health problems, 82% provided family planning assistance, 79% provided maternity care, and 81% provided emergent care. The majority of rural NPs (79%) saw, on average, 6 to 15 patients a day. In approximately

80% of the practices a physician was available on site, periodically. In 97% of the practices, the physician was available by telephone and in 60% of the practices the physicians provided additional consultation.

Sidani, Irvine, and DiCenso (2000) studied a sample of 166 NPs. Within the sample, 74.1% (123) of the respondents were currently working as NPs in primary health care settings, 18.7 % worked as staff nurses, 1.8% worked as NPs in acute care setting, 3.6% were not working as staff nurses or NPs, and 1.8% did not reply to the question. The majority of the primary care nurse practitioner (PCNPs) were women who were married. The mean age of the participants was 41.3 years (*SD* was not reported). Approximately 60% of the nurses were diploma prepared and 60% had taken post basic-training, which most commonly consisted of a baccalaureate degree. The average number of years the respondents had been nursing was 18.8 years and the average number of years reported in the PCNP role was 3.7 years (*SD* was not reported). The majority (79.7%) of the PCNPs worked in one setting. Approximately 50% of the respondents worked in community centres, 10% worked in a fee-for-service family physician office, health service organizations, and outpost settings/nursing stations; and 40% worked in 'other' types of agencies, which included educational institutions and aboriginal health services.

Almost all of the agencies where the NPs practiced offered services in English (98%), 30% in French, and 42% in "other" languages (Sidani, Irvine, & DiCenso, 2000). Wellness care, care of minor acute illness, and monitoring of chronic illnesses were offered in the majority of all agencies. Over 60% offered care of major acute illnesses and palliative care. An additional 25% offered "other" services for specific populations

such as the homeless, aboriginal people, pregnant women, and those with psychosocial problems. The agencies in this study also employed physicians, nurses, and other health care providers (i.e., social workers, dieticians, chiropodists, mental health workers, health educators, and dentists). Over one-third (36.6%) of the agencies 'always' provided on site physician back-up for the NPs.

The study conducted by Beal, Stevens, and Quinn (1997) included a sample of 315 neonatal nurse practitioners (NNP) working in the Neonatal Intensive Care Unit. The average age of the respondents in the study was 38.9 (*SD* was not reported). The majority of the NNPs worked fulltime in the Neonatal Intensive Care Unit, were experienced (mean= 16.22 years; *SD* was not reported), not master's prepared (53%), and considered themselves at Benner's stage of advanced or intermediate role development. Participants who reported being of the intermediate level of Benner's role development frequently had fewer than five years of experience and those who reported being of the advanced level had more than five years of experience. Very few NNPs in the study reported having a NP as a mentor (22%). More NNPs reported that they were preceptored by nurses (43%) than physicians (32%). The majority of the respondents reported to (45%) and were paid by (61%) departments of nursing. Forty-five percent of the participants were evaluated by supervisors in nursing and medical departments.

Seven studies included job satisfaction variables that were intrinsic and extrinsic in nature (Beal, Steven, & Quinn 1997; Kacel, Miller, & Norris, 2005; Koelbel, Fuller, & Misener, 1991; Linn, 1975; Miller, Aplod, Baas, Berner, & Levine-Brill 2005; Misener & Cox, 2001; Sidani, Irvine, & DiCenso, 2000). The intrinsic variables studied were: autonomy (Kacel et al., 2005; Miller et al., 2005; Sidani et al., 2000), sense of

accomplishment (Beal et al. 1997; Kacel et al.; Misener & Cox), advancement (Koelbel et al., 1991), recognition (Beal et al.; Koelbel et al.; Sidani et al.), respect (Miller et al.), the challenge of work (Kacel et al.; Miller et al.; Misener & Cox), variety (Beal et al.; Kacel et al.; Koelbel et al.; Linn; Miller et al.), flexibility (Beal et al.), the ability to deliver quality care (Kacel et al.; Miller et al.; Misener & Cox), helping others (Koelbel et al.), ability utilization (Koelbel et al.), the work itself (i.e., time spent providing direct care to patients) (Beal et al.; Misener & Cox), practicing without compensating moral values (Koelbel et al.), responsibility (Linn), and the possibility for growth (i.e., access to preceptors and challenge of learning) (Beal et al.; Misener & Cox). Based on the results of these previous seven studies the intrinsic variables mentioned above were all significant predictors of job satisfaction of nurses practicing in ANP roles with the exception of responsibility (Linn).

The following extrinsic variables were found to be significant predictors of job satisfaction among nurses practicing in ANP roles: company policy and administration (i.e., vacation time, paid education days, lack of involvement in research, time off to serve on professional committees, administrative restraints, lack of public awareness of the NP role) (Beal, Steven, & Quinn 1997; Kacel, Miller, & Norris, 2005; Koelbe, Fuller, & Misener, 1991; Miller, Aplod, Baas, Berner, & Levine-Brill 2005, 1997; Misener & Cox, 2001; Sidani, Irvine, DiCenso, 2000), supervision (i.e., human relations, process used in conflict resolution) (Koelbel et al., 1991; Miller et al., 2005; Misener & Cox, 2001), salary/benefits (i.e. monetary bonuses, compensation, remuneration) (Beal et al.; Kacel et al., 2005; Koelbel et al.; Linn, 1975; Misener & Cox), reward distribution (Kacel et al.; Misener & Cox, 2001), hours (Miller et al.), interpersonal relationships (i.e., being

part of a multidisciplinary team, isolation from colleagues) (Beal et al.; Sidani et al., 2000), working conditions (i.e., increased workloads and increased patient acuity) (Beal et al.; Miller et al.; Sidani et al.), and job security (Kacel et al.; Koelbel et al.).

Five studies examined other variables in addition to job satisfaction including, job stress (Linn, 1975), intention to stay (Todd, Farquhar, Camilleri-Ferrante, 1998), employment conditions (Sullivan, Dachelet, Sultz, & Henry, 1978), quality of care (Todd et al., 1998), relationships with patients and health care professionals (Todd et al.), decision making (Sidani, Irvine, & DiCenso, 2000), task performance (Linn), perceived scope of practice (Sidani et al., 2000), practice philosophy (Beal, Steven, & Quinn, 1997), and motivation (Sullivan et al., 1978), which were studied in combination with demographic and job satisfaction variables. In only four studies were significant relationships found between the variables studied (Beal, Steven, & Quinn, 1997; Bullough, 1974; Mueller& McCloskey, 1990; Todd, Farquhar, & Camilleri-Ferrante, 1998).

Todd, Farquhar, and Camilleri-Ferrante (1998) found that a greater proportion of community midwives were satisfied with the variety of their work (Fisher exact, $p = .0044$) when compared to hospital midwives. In the same study, significantly more community midwives used all their skills (Fisher exact, $p = .000072$) and had the opportunity to develop their skills (Fisher exact, $p = .000014$). Compared to hospital midwives, community midwives found their current position was considerably more disruptive to their personal lives with comparison to previous positions (Fisher exact, $p = .000001$). The goal of team midwifery was to enhance quality of care by improving continuity of care and increase client satisfaction. Community midwives were more

likely to report that the introduction of team midwifery affected the quality of care (Fisher exact, $p = .0002$). Only one third of the community midwives thought that quality of care had been improved with team midwifery while the majority stated that the effect on the quality of care was adverse. The midwives felt heavy workloads, inadequate staffing, on call hours, and lack of educational support had detrimentally affected the quality of care provided to their clients. Community midwives felt happier in their positions and reported that their skills and knowledge were fully utilized ($z = -4.89$, $p < 0.0001$) compared to hospital midwives. Community midwives were significantly more satisfied with their professional roles (mean scores = .653 and .283, $z = -2.1883$, $p = .0287$) and development (mean scores = .620 and .219, $z = -2.7584$, $p = .0058$) than hospital midwives.

In the study conducted by Beal, Steven, and Quinn (1997), neonatal nurse practitioners who reported to, were paid by, or were evaluated by supervisors in departments of medicine, were more satisfied than neonatal nurse practitioners who reported to, were paid by, or evaluated by supervisors in departments of nursing. The neonatal nurse practitioners, who displayed a strong nursing practice philosophy, found that educational activities and research were the most important factors that influenced their role satisfaction. Neonatal nurse practitioner who displayed a more medical practice philosophy stated that time spent with patients and the number and kinds of patients were most influential in affecting their overall level of role satisfaction.

Bullough (1974) found a significant difference in the level of intrinsic job satisfaction (Chi-Square = 7.72; *df* = not reported; $p < 0.01$) between NPs (including extended role nurses) and other registered nurses. The participants in the study saw ANP

roles as needing more creativity, greater use of skills, and more responsibility that the 'traditional' nursing role and they rated the NP role as more interesting and important.

In the modification of Mueller and McCloskey's (1990) instrument and the development of the Misener Nurse Practitioner Job Satisfaction Scale the researchers found that following factors produced fairly high internal consistency: intra-practice partnership/collegiality (alpha = .94), challenge/autonomy (alpha = .89), professional , social, and community interaction (alpha = .84), professional growth (alpha = .86), time (alpha = .83) and benefits (alpha = .79).

2.4.7 Findings

In the 10 reviewed studies, the reported level of job satisfaction of nurses in NP roles varied from extremely to minimally satisfied. In seven studies, nurses in NP roles said they were extremely to somewhat satisfied (Beal, Steven, & Quinn 1997; Bullough, 1976; Koelbel, Fuller, & Misener, 1991; Miller, Apold, Baas, Berner, & Levine-Brill, 2005; Sidani, Irvine, & DiCenso, 2000; Sullivan, Dachelet, Sultz, & Henry, 1978; Todd, Farquhar, & Camilleri-Ferrante 1998). In two studies NPs reported they were minimally satisfied with their jobs (Kacel, Miller, & Norris 2005; Misener & Cox, 2001). Participants who rated their level of job satisfaction as extremely to somewhat satisfying varied by specialty, age, years of experience, hours worked, and practice setting. The only similarity found in five of the seven studies was that NPs who reported being extremely to somewhat satisfied were not master's prepared (Beal et al., 1997; Koelbel et al., 1991; Sidani et al., 2000; Sullivan et al., 1978; Todd et al. 1998). Participants in two studies who reported being minimally satisfied did not share any similar demographic characteristics (Kacel, Miller, & Norris, 2005; Misener & Cox, 2001). Linn (1974) did

not report an overall level of job satisfaction; however, the researcher observed that nurses' level of satisfaction increased when nurses in non-NP roles assumed additional educational training to assume NP roles.

The findings of seven studies indicate that intrinsic factors have a strong positive association with the level of job satisfaction of nurses in NP roles (Beal et al., 1997; Kacel, Miller, & Norris, 2005; Koelbel, Fuller, & Misener, 1991; Linn, 1975; Miller, Apold, Baas, Berner, & Levine-Brill, 2005; Misener & Cox, 2001; Sidani et al., 2000). In six studies, extrinsic factors were associated with high levels of job dissatisfaction (Kacel et al., 2005; Koelbel et al., 1991; Linn ; Miller et al., 2005; Misener & Cox, 2001; Sidani et al., 2000). In three studies there were conflicting findings concerning the relationship between intrinsic and extrinsic factors and job satisfaction. Koelbel et al. (1991) found that recognition and advancement (both intrinsic factors) contributed to job dissatisfaction while security (extrinsic factor) contributed to job satisfaction. Findings of Beal et al. (1997) and Sidani et al. (2000) suggest that interpersonal relationships (extrinsic factor) lead to an increase in job satisfaction.

Kacel, Miller, and Norris (2005) found that NPs employed in urban settings scored the highest on six factors (i.e., intra-practice partnership; challenge/autonomy; professional, social, and community interaction; professional growth; time; and benefits) that were associated with the overall level of job satisfaction while NPs employed in rural settings scored the lowest on the same six factors. In another study, which compared rural and non-rural NPs, Sullivan, Dachelet, Sultz, and Henry (1978) observed that the percentage of nurses who were very satisfied with their role was slightly higher for rural NPs.

Kacel, Miller, and Norris (2005) found that NPs with one year of experience or less were most satisfied will all aspects of their roles; however, the level of job satisfaction began to fall after the first year of practice and continued to fall with each year of experience. After the eighth and eleventh year of practice the level of job satisfaction had reached a plateau (Kacel et al., 2005).

Not all of the reviewed articles reported whether the participants had obtained a degree prior to taking on the NP role. The proportion of master's prepared NPs varied from 9% to 85%. The majority (85%) of the NP participants were master's prepared in the study by Kacel, Miller, and Norris (2005). Forty-seven percent of the NPs were master's prepared in the study published by Beal, Steven, and Quinn (1997) compared to only nine percent of NPs studied by Sullivan, Dachelet, Sults, and Henry (1978). Koelbel, Fuller, and Misener (1991) reported that 28% of the NPs in this study had a master's degree.

Beal, Steven, and Quinn (1997) found that more experienced neonatal nurse practitioners felt direct patient care management, procedures, attendance at deliveries, and teaching were most satisfying; whereas less experienced nurses found daily management and long term planning for infants and their families most satisfying. Less experienced neonatal nurse practitioners expressed a desire for more mentorship programs and support from their colleagues (Beal et al., 1997).

In the study by Todd, Farquhar, and Camilleri-Ferrante (1998) community midwives said they felt the long hours and being on call were disruptive to their family and social life. Twenty-eight percent of the community midwives in the study and 41% of the hospital midwives reported that they worked beyond their shifts (Todd et al.,

1998). In the study by Sidani et al. (2000) approximately 70% of primary care nurse practitioners (PCNPs) surveyed said they were able to deliver care they would like. Lack of time, lack of interpreters, and the desire to offer holistic and preventative services were the reasons PCNPs offered for why the felt they were unable to deliver the care they would like (Sidani et al., 2000). The PCNPs in the study said they felt they were implementing a role for which they were trained (Sidani et al.).

In the study by Sullivan, Dachelet, Sultz, and Henry (1978), 10% of the rural NPs surveyed said location of employment was the most important reason for selecting a practice setting. The researchers concluded that the most important factor in recruiting nurses to rural settings was the opportunity for more flexibility and a creative approach to health care delivery, followed by training and educational opportunities (Sullivan et al., 1978). Pay did not appear to be an incentive because the average annual salary of rural NPs did not differ markedly from the average salary of the non-rural NPs in the study (Sullivan et al.). Employers of the rural NPs in the study stated that most important reason for hiring NPs was to increase services to the public and enhance the quality care being delivered (Sullivan et al.).

Misener and Cox (2001) found that the factors that correlated highest with job satisfaction were intrinsic factors while extrinsic factors accounted for the highest levels of dissatisfaction. Misener and Cox found that NPs in their study were most satisfied with the percentage of time spent in direct patient care, the challenge of their work, a sense of accomplishment, ability to deliver quality care, and access to preceptors. The most common dissatisfiers were monetary bonuses that were available in addition to salary, opportunity to receive compensation for services performed outside of regular

duties, reward distribution, involvement in research, and the process used to resolve conflict.

2.5 Review of Studies on Job Satisfaction of Nurses in ANP Roles Post-analysis

A literature review was conducted post-analysis to evaluate additional contributions to the literature in the area of job satisfaction of nurses in ANP roles. Using the same search terms the literature search produced the works of three additional researchers (Kannusamy, 2006; Schiestel, 2007; Wild, Parsons, & Dietz, 2006). Summaries of the additional research articles can be found in Appendix A.

Schiestel (2006) studied a group of adult nurse practitioners (N = 155) practicing in urban and rural areas in the United States to determine their level of job satisfaction. The reported response rate was 44%. A descriptive, non-experimental study design was used. Data were collected using a self-administered survey containing 44-items from the Misener Nurse Practitioner Job Satisfaction Scale, which used a 6-point Likert scale, where 1 represented 'very dissatisfied' and 6 'very satisfied.' The tool proved to be a reliable measure of NP job satisfaction with a Cronbach's alpha of .96. The majority of the sample were female, aged 40-51 years, and worked full-time in a private medical practice. The NPs' salary ranged from $40,000-$100,000 per year. Approximately 70% of NPs reported practicing less than 10 years, with 15% reporting more than 20 years of practice. The NPs' overall level of job satisfaction indicated they were 'minimally satisfied,' with an overall mean score of 4.69 (*SD* = .76). Descriptive statistics were used to analyze demographic data and *t*-tests and analysis of variance (ANOVA) were used to analyze study variables and job satisfaction scores. Adult nurse practitioners were more satisfied with: challenge/autonomy, time, and professional, social, and community

interaction and less satisfied with intra-practice/collegiality, professional growth, and benefits. No statistically differences results were produced in the analyses of job satisfaction and the following variables: gender, the type of employer, annual salary, membership in professional nursing organizations, or full-time versus part-time employment status.

The purpose of the study conducted by Wild, Parsons, and Dietz (2006) was to identify the demographics, work setting, level of job satisfaction, attitudes towards the environment, and perceived barriers of practice of the NPs in the United States. The reported response rate was 33%. A random sample of NPs (N = 66) participated in a survey that included a 31-item questionnaire developed by Mueller and McCloskey (1990), as well as demographic data. Validity and reliability testing were determined to be acceptable. No statistical analyses were performed. Results were presented as percentages of participants responding to each of the categories in the 5-point Likert scale, where higher values represented greater levels of satisfaction. The majority of NPs were: female, married, did not have children at home, Caucasian, practiced more than 20 years as an RN, and had an advanced practitioner certificate for NPs. Most NPs were aged 50-59 and worked in ambulatory care, with the majority of NPs working in a group setting with a mix of MDs and NPs. The NPs in California reported a high level of job satisfaction, specifically in regards to: schedules, flexibility of hours, and inter-professional relationships. The NPs indicated lower levels of satisfaction with the following work-related attributes: maternity leave time, child care facilities, social contact with colleagues at work, social contact with colleagues after work, interact professionally with other disciplines, belonging to committees, control over what goes on

in the work setting, and opportunities to participate in nursing research. The level of job satisfaction did not differ between NPs practicing in the north versus the south.

The purpose of the article written by Kannusamy (2006) was to describe the first cohort of advanced practice nurses (n = 15) from Singapore and to evaluate the components of their role, job characteristics, and level of role satisfaction. Data were collected by using a questionnaire with a 4-point Likert scale. The questionnaire was administered during the internship at three-month, six-month, and 12-month intervals. Means and percentages were used to report the findings from the analysis. The majority of participants were female and Chinese. The ages of the participants ranged from 29-51 years with a mean age of 39.7 (*SD* was not reported). All of the participants worked full-time in acute care settings, specifically mental health or emergency departments. The numbers of hours worked ranged from 44-60 and seemed to increase by the end of the 12-month period. The time participants spent in direct patient care went down slightly from the third month (66.6%) of internship to the twelfth month (65.9%). As the internship progressed, participants found they were spending more time engaging in research, projects, and quality improvement initiatives and less time performing administrative and teaching duties. At the end of the 12-month period the majority of participants were making use of the practice protocols as a tool to guide their practice. Participants also contributed to the development of the practice protocols in their area.

The majority of the NPs were 'somewhat' satisfied with their role and the level of collaboration, but the level of satisfaction decreased by the twelfth month; as evidence by graphs presented over time (Kannusamy, 2006, p. 548). The participants reported the greatest satisfaction with the autonomy they exercised in patient care, their ability to

influence clinical care, the collaborative nature of their practice, and the recognition and respect they received from their colleagues. The participants reported that they were dissatisfied with the clarity of their role, inability to focus only on clinical care, and lack of support from their colleagues.

2.6 Summary of the Literature Review

There has been extensive previous research on the job satisfaction of nurses and factors associated with job satisfaction. The previous research suggests that job satisfaction has a direct impact on the recruitment and retention of nurses (Hegney et al., 2002) and that the more remote the community the harder it is to recruit and retain nurses (Bushy, 2002). The literature on job satisfaction of nurses practicing in rural and remote settings has grown, but there has been very little research on job satisfaction of nurses practicing in these settings in Canada. The Canadian studies of job satisfaction of nurses tended to focus on nurses practicing in traditional nursing roles and failed to examine job satisfaction of nurses practicing in ANP and NP roles. Of the 13 studies relevant to the present study, 10 were conducted in the United States (Beal, Steven, & Quinn, 1997; Bullough, 1974; Kacel, Miller, & Norris, 2005; Koelbel, Fuller, & Misener, 1991; Linn, 1975; Miller et al., 2005; Misener & Cox, 2001; Schiestel, 2007; Sullivan, Dachelet, Sultz, & Henery, 1978; Wild, Parsons, & Dietz, 2006) and there was one study conducted in each of the following countries: Canada (Sidani, Irvine, & DiCenso, 2000), Malaysia (Kannusamy, 2006), and the United Kingdom (Todd, Farquhar, & Camilleri-Ferrante, 1998). Of the 13 studies critiqued, five studies reported NPs practicing in general NP roles (Bullough; Kacel et al., 2005; Linn; Misener & Cox; Wild et al., 2006). The remaining studies reported NPs practicing in primary care (Koelbel et al., 1991; Sidani et

al., 2000), acute care (Beal et al., 1997; Kannusamy), family (Miller et al., Sullivan et al., 1978), and adult (Schiestel) NP roles, as well as midwifery (Todd et al., 1998). Only one of 13 studies examined job satisfaction of rural NPs (Sullivan, Dachelet, Sults, & Henry, 1978).

With the recent formalization and regulation of the NP role in Canada, it is expected that increasingly NPs will be delivering health care services to the general public, especially in rural and remote areas. Further research is needed on the NP's perceived level of job satisfaction in rural and remote settings in Canada. Factors associated with job satisfaction of NPs practicing in rural and remote settings in Canada also needs to be identified because factors associated with job satisfaction have been found to vary by practice setting (Lu, While, & Barriball, 2005). By studying job satisfaction of nurses practicing in NP roles in rural and remote settings in Canada, factors associated with recruitment and retention of nurses will be identified. By developing a strategic plan to address recruitment and retention issues, health care administrators and policy makers can prevent a human resource shortage that may be worsened by the current nursing shortage.

2.7 Research Objectives and Hypotheses

The following research objectives and hypotheses are based on the conceptual framework that was previously discussed in section 2.1 which includes; the individual, work environment, and community. Herzberg's (1966) Motivation-Hygiene Theory was used to guide the hypotheses related to intrinsic factors of job satisfaction.

2.7.1 Objectives

The objectives of the study were to describe similarities and differences between RNs practicing in rural and remote settings in Canada whose practice roles were categorized as NP versus non-NP in relation to:

1. Demographic profile
2. Job Satisfaction
3. Community Satisfaction

The final objective of the study was to explore what the most important work-related attribute of the RNs whose practice roles were categorized as NPs.

2.7.2 Hypotheses

Hypothesis 1. The reported level of job satisfaction will be higher for RNs whose practice roles were categorized as NPs compared to RNs whose practice roles were categorized as non-NPs.

Rationale. The nature of the NP role would suggest that RNs practicing in these roles would require a greater level of skill, responsibility, and autonomy compared to RNs in non-NP roles. Registered nurses practicing in NP roles are more likely to be in a position that requires them to participate in decision making processes and policy development compared to RNs in non-NP roles. These factors have been identified in the literature as key sources of nurses' job satisfaction (Herzberg, 1966; Kacel, Miller, & Norris, 2005; Stamps, 1997).

Hypothesis 2. The reported level of intrinsic job satisfaction factors (summation of the autonomy and professional status subscales from the Index of Work Satisfaction

Scale) will be higher in RNs whose practice roles were categorized as NPs compared to RNs whose practice roles were categorized as non-NPs.

Rationale. Intrinsic factors are identified in Herzberg's (1966) Motivation-Hygiene Theory as key components of job satisfaction. One might assume that the desire to reach self-actualization may influence an RN to pursue a career as a NP. An RN whose practice role was identified as a NP may experience an increase in autonomy, responsibility, career advancement, or opportunity for personal growth and, thereby, have greater job satisfaction related to these intrinsic work-related factors.

CHAPTER THREE

METHODOLOGY

3.1 Design

An analysis was conducted using data collected from the survey component (Stewart et al., 2005) of the multi-method project, *The Nature of Nursing Practice in Rural and Remote Canada*, (MacLeod, Kulig, Stewart, Pitblado, & Knock, 2004; Stewart et al., 2005), which was the first nation-wide study of its kind in Canada to examine the demographic characteristics, work environments, nursing practice roles, context of nursing, and issues related to the nursing work life of RNs practicing in rural and remote areas in Canada (MacLeod et al. 2004; Stewart et al.). The present analysis used a non-equivalent comparison group design (Shadish, Cook, & Campbell, 2002, p. 125) to describe the similarities and differences between RNs whose practice roles were categorized as NP versus non-NP on job satisfaction and individual, work environment, and community variables. A qualitative exploratory content analysis was conducted to identify themes in the NP group responses to the open-ended question: "What is the most important thing to you about your nursing position?"

3.2 Setting and Sampling Recruitment Procedures

Potential study participants were mailed the survey questionnaire with the assistance of the 12 professional nursing associations representing all provinces and territories (Stewart et al., 2005). In most cases, the nursing associations mailed the study information and questionnaires to nurses practicing in rural or remote settings in the

provinces or territories. However, in some cases, the nursing associations gave the researchers access to the mailing information (i.e., home addresses and postal codes) of the nurses licensed to practice in each jurisdiction, but after a confidentiality contract had been signed. The use of postal codes of residence to identify rural nurses was not ideal; however, no other tracking information was available from the nurses' registration data. For the purpose of the study, rural was defined by using the Statistics Canada (1997) definition of rural and small town: "the population living outside the commuting zones of large urban centres having a core population of 10,000 or more" (Stewart et al., p. 128). The term remote was reserved for outpost settings in the provinces and all practice settings located in the Yukon, Northwest Territories, and Nunavut (Stewart et al.).

3.3 Sample

In the original study, the inclusion criteria were all Canadian RNs who were practicing in outpost settings (i.e., nursing stations) and northern territories and a random sample of rural Canadian RNs stratified by province. Exclusion criteria were: RNs who resided in a rural community but practiced in large urban setting; and RNs who were not currently practicing (i.e., retired for more than 6 months, on long-term disability, etc.). Each provincial nursing association was provided with a computer file of all rural postal codes in the provinces (developed by J.R. Pitblado, the geographer on the research team) and the sample size that would provide 95% confidence based on the rural-to-urban ratios of the population of that province. The final total sample included 3,933 respondents for an overall response rate of 68%. The sample represented RNs practicing in all regions of Canada from October 2001- June 2002 (Stewart et al., 2005).

For the present study, the sample selected for analysis included all study participants who responded to a set of selected questions inquiring about nursing practice activities (Appendix B, Question E1 and E3). The selected questions were chosen from five criteria based on the recommended role description and definition of NPs outlined in the Canadian Nurse Practitioner Initiative (CNPI), *The Time is Now* (2006). The CNPI (2006) stated that NPs are "registered nurses with additional educational preparation and experience who possess and demonstrate the competencies to autonomously diagnose, order, and interpret diagnostic tests, prescribe pharmaceuticals and perform specific procedures within their legislated scope of practice" (p. 4). The CNPI further described the recommended role of NPs as to "emphasize health promotion and partnership development… " (p. 4). The five criteria from the CNPI definition that guided the categorization from the survey questions E1 and E3 were: (1) ordering diagnostic tests, (2) interpreting diagnostic tests, (3) prescribing medication, (4) facilitating health promotion in the community, and (5) performing procedures. For the fifth criterion, two procedures were selected from E1 (suturing and performing pap smears) because these activities are common to NP practice. These six nursing practice activities (E1 m, o, i, f, q, and E3) were used to operationalize the RNs' practice roles as NP versus non-NP.

Participants were categorized in groups based on whether they responded "Yes" or "No" to performing the six specific nursing practice activities. The NP group was formed by selecting participants who answered positively to all six nursing practice activities (n = 327). The participants in the non-NP group answered negatively to the same set of six nursing practice activities (n = 1,151). The other 2,455 participants (62.4% of the total sample) had a wide variety of mixed responses and were excluded

from the analysis. This procedure created two homogeneous groups (NP vs. non-NP) in relation to the CNPI description of the NP role for the purpose of comparison.

3.3.1 Validation of the Method used to Categorize RNs into NP versus Non-NP Groups

Table 1 provides a comparison of RNs who were categorized as NP versus non-NP in relation to three variables from the survey that provide some validation for categorizing the sample into NP and non-NP groups. The three variables examined were: perception of role as advanced nursing practice (ANP), current position as Nurse Practitioner, and work setting as Nursing Station (outpost/nurse clinic). These variables represent survey questions (Appendix B) E5.5, B7, and B4, respectively.

In section E5.5 of the survey, participants were asked to identify if they thought of their role as advanced nursing practice (ANP), which is a broad term that includes different types of advanced practice (i.e., NPs and Clinical Nurse Specialists). Of the total sample (N = 3,933), 1,347 RNs (34.2%) thought of their role as ANP and 2,586 RNs (65.8%) thought their role was not ANP. Only 304 of RNs who perceived their role as ANP (22.6 % of 1,347) were categorized as NP based on reports that they regularly: (1) ordered diagnostic tests, (2) interpreted diagnostic tests, (3) prescribed medications, (4) facilitated health promotion activities in the community, and (5) performed procedures (i.e., suturing and pap smears) as part of their current practice. However, the remaining 1,043 RNs (77.4%) who perceived their role as ANP may have been practicing in Clinical Nurse Specialist or in advanced roles, but not to a full scope of practice as defined by the CNPI (2006) and operationalized in this study.

In section B7 of the survey, participants were asked to identify their current employment position. Of the total sample (N = 3,933), 167 RNs (4.2%) reported that

they were employed in a NP position, and only 86 of these RNs (51.5%) were regularly performing the full set of activities used to define the NP role in the present analysis. Twelve of the RNs (7.2%) who reported their current position was NP did not perform any of the activities in the criteria for this study. The remaining 69 RNs (41.3%) who reported their current position as NP were practicing some, but not all of the activities. Of these 69 RNs, 12 reported performing all practice activities except facilitating health promotion activities in the community.

Finally, in section B4 of the survey, participants were asked to identify their work setting. Of the total sample (N= 3,933), 488 RNs (12.4%) reported their work setting as a Nursing Station (outpost/nurse clinic). The majority of the RNs (n = 256, 79.3%) who were categorized in the NP group reported practicing in Nursing Station. Only 67 RNs (20.7%) who were categorized in the NP group reported practicing in other work settings.

Prior to conducting comparisons between the NP and non-NP groups, statistical analyses were conducted to further validate the method used to categorize RNs into NP (n = 327) and non-NP (n = 1,151) groups based on the CNPI (2006) criteria. Three crosstabulations were conducted using the following nursing practice and employment variables: (1) I think of my role as advanced nursing practice (Appendix B, Question E5.5), (2) current position (Appendix B, Question B7), and (3) work setting (Appendix B, Question B4) (see Table 1). The first crosstabulation was conducted to compare the respondents' perception of their role as advanced nursing practice with the NP versus non-NP group categorization using the CNPI (2006) criteria. As expected, a larger proportion of RNs who were categorized in the NP group thought of their role as advanced nursing practice [Chi-Square (1, N = 1478) = 715.95, $p < .001$] (see Table 1).

The second crosstabulation was conducted to compare the current employment position of RNs categorized in NP versus non-NP groups. As anticipated, a larger proportion of RNs who were categorized in the NP group were currently employed in NP positions compared to RNs in the non-NP group [Chi-square (1, N = 1468) = 261.58, $p < .001$] (see Table 1).

Table 1. Participants' Perception of their Role as Advanced Nursing Practice (ANP), Current Position, and Work Setting of RNs in NP versus Non-NP Roles

	NP Group		Non-NP Group		
Variable	*n*	(%)	*n*	(%)	Chi-Square*
I think of my role as ANP					
Yes	304	(93.0)	168	(14.6)	715.95, $p < .001$
No	23	(7.0)	983	(85.4)	
Total	327	(100.0)	1,151	(100.0)	
Current position					
Nurse Practitioner	86	(26.7)	12	(1.0)	261.58, $p < .001$
Other	236	(73.3)	1,134	(99.0)	
Total**	322	(100.0)	1,146	(100.0)	
Work setting					
Nursing Station (outpost/nurse clinic)	256	(79.3)	5	(0.4)	1,066.09, $p < .001$
Other	67	(20.7)	1,141	(99.6)	
Total**	323	(100.0)	1,146	(100.0)	

*Reported with continuity correction.
**Due to missing values the total does not equal the full sample size.

Finally, a crosstabulation of work setting and role (NP vs. non-NP group) indicated that a larger proportion of RNs categorized in the NP group were employed in Nursing Stations (outposts/nurse clinics) [Chi-Square (1, N = 1469) = 1066.09, $p < .001$] compared to RNs in the non-NP group (see Table 1). The statistically significant results of the crosstabulations indicated that compared to the RNs categorized in the NP group,

RNs categorized in the NP group are more likely to perceive their role as ANP, be employed in NP positions, and work in Nursing Stations.

3.4 Ethical Considerations

The proposal and questionnaire for *The Nature of Nursing Practice in Rural and Remote Canada* survey received approval from the University of Saskatchewan Behavioral Research Ethics Board (Stewart et al., 2005). Prior to starting the present study, the research proposal was submitted for ethical review and approval was granted by the Behavioral Research Ethics Board of the University of Saskatchewan. In the original study, anonymity and confidentiality of the data were protected by the provincial and territorial nursing association conducting the random sampling from their database within the subset of "rural" RNs (defined by postal codes provided by the research team). Postal codes were used to identify rural residents. Most of the provincial and territorial nursing associations did not release the names and addresses of their members for the purpose of research, while others agreed to release the information with a contract in place to protect confidentiality of the members. The provinces and territories that chose to withhold the contact information for their members were sent sealed mail-out packages and were asked to affix the names and addresses to the packages and mail the packages. All mail-out packages included a letter describing participation in the survey, why and how the participants were selected, the usefulness of the study, and the steps taken to ensure confidentiality of the responses and protection of anonymity of the respondents (Appendix C). A self-addressed envelope with the correct postage was included in each mail-out package. To ensure anonymity of the respondents, personal identifiers were not used and tracking numbers were assigned to the packages (Stewart et al.). In cases where

a contract was signed to release the names and addresses to the research team for mailing, confidentiality was maintained and one research member kept this information separate from the investigator team to maintain anonymity as much as possible.

3.5 Instrument

The research instrument was a questionnaire developed for *The Nature of Nursing Practice in Rural and Remote Canada* based on information obtained through a thorough literature review and content experts (Stewart et al., 2005). The questionnaire included various demographic items as well as a number of embedded scales including: a modified version of the Index of Work Satisfaction (Stamps, 1997) and the Community Satisfaction Scale (Henderson-Betkus & MacLeod, 2003). A single item was also used to measure the participants' level of satisfaction with their work community (Remus, Smith, & Schissel, 2000). In addition, the self-reported survey included a set of open-ended questions for hand written responses (Appendix B).

One of the embedded scales used for the present study was a modified version of the Index Work Satisfaction (IWS) questionnaire (Stamps, 1997). The IWS uses a 7-point Likert scale (7 = 'strongly agree,' 6 = 'agree,' 5 = 'mildly or somewhat agree,' 4 = 'undecided,' 3 = 'mildly or somewhat disagree,' 2 = 'disagree,' and 1 = 'strongly disagree') and includes seven subscales of job satisfaction and the perceived importance of seven components of job satisfaction (Stamps). For *The Nature of Nursing Practice in Rural and Remote Canada* survey, the IWS was adapted to be more reflective of the nurses practicing in rural and remote settings and to reduce the length of the survey (Stewart et al., 2005). The researchers modified the IWS by decreasing the number of items in each subscale to five and excluding the subscale on Task Requirements because

it was similar to the Job Content Questionnaire (Karasek & Theorell, 1990) (Appendix B, Question G1-15), which was already part of *The Nature of Nursing Practice in Rural and Remote Canada* survey. The modified version of the IWS did not include a rating of the perceived importance of each subscale whereas the original IWS did (Stamps, 1997). Instead, an open-ended question was used to explore the respondents' perceptions: "What is the most important thing to you about your nursing position?" (Appendix B, Question G16) (Stewart et al.). The modified IWS subscales (i.e., autonomy, pay, organizational policy, professional status, nurse-physician relationships, and nurse-nurse relationships) included the following items (Appendix B, Question F1-30):

Autonomy.

9) I have too much responsibility and not enough authority.

15) A great deal of independence is permitted, if not required, of me.

18) I am sometimes frustrated because all of my activities seem programmed for me.

19) I am sometimes required to do things in my job that are against my better professional nursing judgment.

29) I have the support of my supervisors to make important decisions in my work.

Pay.

1) My present salary is satisfactory.

7) Considering what is expected of nursing personnel at this organization, the pay we get is reasonable.

12) The present rate of pay for nursing service personnel at this organization is not satisfactory.

20) Based on feedback from nurses in other organizations, the pay is fair.

30) Pay scales for nursing personnel need to be upgraded.

Organizational Policy.

6) There is a great gap between the administration of this organization and the daily problems of the nursing services.

10) This organization offers opportunities for advancement/promotion.

14) There is ample opportunity for nursing staff to participate in the administrative decision-making process.

26) I have all the voice in planning policy and procedures that I want.

28) The nursing administrators generally consult with the staff on daily problems and procedures.

Professional Status.

5) I have no doubt in my mind that what I do in my job is really important.

16) What I do on my job does not add up to anything really significant.

21) I am proud to talk to other people about what I do in my job.

24) If I had the decision to make all over again, I would still go into nursing.

27) My particular job really doesn't require much skill or "know-how."

Nurse-Physician Relationships.

3) Physicians in general cooperate with nursing staff at my organization.

11) There is a lot of teamwork between nurses and doctors at my organization.

22) I wish the physicians here would show more respect for the skill and knowledge of the nursing staff.

23) Physician(s) working with this organization generally understand and appreciate what the nursing staff does.

25) The physician(s) working at this agency look down too much on the nursing staff.

Nurse-Nurse Relationships.

2) The nursing personnel in this organization do not hesitate to pitch in and help one another out when things get in a rush.

4) New employees are not quickly made to feel at home in this organization.

8) A good deal of teamwork is present between various levels of nursing personnel in this organization.

13) The nursing personnel in this organization are not as friendly and outgoing as I would like.

17) There is a lot of "rank consciousness" in this organization: nurses seldom mingle with those of less experience or with other professionals or staff.

The total score of each subscale ranges from 5-35. The higher the score the higher the level of satisfaction. To avoid response set bias, counterbalanced items were included in the survey. In the original study the modified IWS produced the following reliability coefficients: (1) Pay, alpha = .90; (2) Autonomy, alpha = .66; (3) Organizational Policy, alpha = .76; (4) Professional Status, alpha = .62; (5) Nurse-Physician Interaction, alpha = .77; and (6) Nurse-Nurse Interaction, alpha = .77 (Stewart et al., 2005). Reliability coefficients for the six subscales produced in other studies were as follows: (1) Pay, alpha = .83 - .88, (2) Autonomy, alpha = .69 - .76, (3) Organizational Policy, alpha = .65 - .83, (4) Professional Status, alpha = .29 - .76, (5) Nurse-Physician Interaction, alpha = .81 - .84, and (6) Nurse-Nurse Interaction, alpha = .71 (Stewart et al.). The alpha coefficient for the overall 30-item scale was .87, which is consistent with the range in alpha coefficients from previous studies (alpha = .82 - .91) conducted by

Stamps (1997). The original study produced reliable alpha coefficients when compared to previous studies that use the IWS.

The second embedded scale that was used in addition to the IWS is the Community Satisfaction Scale (Henderson-Betkus & MacLeod, 2003). Henderson-Betkus created the Community Satisfaction Scale based on personal nursing experiences and information obtained through a thorough review of the literature (Henderson-Betkus & MacLeod). The Community Satisfaction Scale uses a 5-point Likert scale (5= 'strongly agree,' 4= 'agree,' 3= 'neutral,' 2= 'disagree,' 1= 'strongly disagree'), which includes 11-items along with an overall community satisfaction item (Henderson-Betkus & MacLeod; Stewart et al., 2005.) (Appendix B, Question C31a-k). In Henderson-Betkus' (2003) original study the reported coefficient alpha was .84, which is consistent with the coefficient alpha reported by Stewart et al. (2005) (alpha = .88). The present study produced a reliable coefficient alpha of .86.

Since the Community Satisfaction Scale focused on the home communities of RNs, a single item was also used to measure how happy participants were with their work community, because some of the RNs work and live in different communities (Appendix B, Question C27a). The latter item came from a questionnaire developed for a sample of rural and urban RNs in Saskatchewan (Remus, Smith, & Schissel, 2000).

3.5.1 Handling of Missing Data

Decision rules were developed to handle missing data and to make the best use of the available data collected using the modified version of the IWS (Stamps, 1997; Stewart et al., 2005), the Community Satisfaction Scale (Henderson-Betkus & MacLeod,

2003), and other variables used in the descriptive analysis. It was decided that participants would be excluded from the analysis if they failed to answer six of the 30-items of the modified IWS (Stamps, 1997; Stewart et al., 2005). If participants omitted one to five items of the modified IWS, the mode of each individual item was used as the replacement value. For the Community Satisfaction Scale (Henderson-Betkus & MacLeod, 2003), participants who failed to answer two items of the 11-item scale were excluded from the analysis. If participants omitted a single item, replacement values were not used. For the other variables, the descriptive analyses included only the participants who responded to the particular survey questions.

3.6 Data Collection

Data collection for *The Nature of Nursing Practice in Rural and Remote Canada* survey took place between October 2001 and July 2002 (Stewart et al., 2005). The researchers used a modified version of Dillman's (2000) Tailored Design Method, which emphasized persistent follow-up techniques. Personalization recommended by Dillman (2000) was not feasible because most of the mailings were done by the nursing associations' staff using packages prepared by the research team with tracking numbers for follow-up. The initial survey packages were mailed in manila envelopes. Two weeks after the packages were sent out, a signed follow-up thank-you/reminder letter was delivered to all potential participants. Two weeks after the follow-up letter, all non-respondents were sent a second package. One month after the second package was delivered, a third package was mailed to non-respondents in a white envelope with colored attention stickers. All packages included a cover letter, the questionnaire, a self-addressed stamped envelope, and a pencil as a token of appreciation (Stewart et al.).

Completed questionnaires were checked for eligibility criteria (Stewart et al., 2005). Registered nurses who were living in rural settings, but commuted to work in large urban settings were excluded. The data from the eligible questionnaires were entered into the database program File Maker Pro. Comments from the open-ended survey questions were entered verbatim. Responses written in French were translated into English prior to entering the information in the database. The data were compiled into a system file using the Statistical Package for Social Sciences (SPSS) software (Stewart et al.).

3.7 Variables

The grouping variable in the present study was used to categorize RNs into NP versus non-NP groups based on reports of performing (or not performing) a set of selected nursing practice activities as part as their current nursing practice. For a more detailed explanation of the sampling method see section 3.3 and 3.3.1. The outcome variables were examined in relation to the individual nurse, the work environment, and the community. The individual variables that were examined included: age, gender, educational preparedness, years of practice, and practice setting (region and area of practice). The work-related variables included job satisfaction in relation to intrinsic (autonomy and professional status) factors and extrinsic factors (pay and organizational policy). Satisfaction with the RNs' home community and work community was also examined.

3.8 Analysis

3.8.1 Quantitative Analysis

Descriptive statistics were used to compare RNs whose practice roles were categorized as NP versus non-NP on the following demographic characteristics: age, gender, region, practice setting (region and area of practice), educational preparedness, and years of practice. To determine similarities and differences between the two groups (NP vs. non-NP), chi-square tests were used for categorical variables (nominal and ordinal). The categorical variables included: gender, region, area of practice, and educational preparedness. The comparison of continuous data between groups was conducted using two-tailed *t*-tests. The continuous variables included: age, years of practice, community satisfaction, and job satisfaction. A significance level of .05 was used.

Hypotheses were tested using analysis of variance (ANOVA). Three one-way ANOVAs using practice role (NP vs. non-NP) as the between subjects factor were conducted. The total summated score of the modified IWS was the dependent variable of the first ANOVA. In the second ANOVA, the dependent variable was the participants' summated scores on the autonomy and professional status subscale of the modified IWS. The dependent variable of the third ANOVA was the participants' summated scores on the pay and organizational policy subscales of the modified IWS (Stamps, 1997; Stewart et al, 2005).

3.8.2 Qualitative Analysis

Content analysis was used to explore the responses to the open-ended question: "What is the most important thing to you about your nursing position?" (Appendix B,

Question G16) of the RNs whose practice roles were categorized as NP roles. All of the raw data were imported from the SPSS system file into the Non-numerical Unstructured Data Indexing, Searching, and Theorizing (NUD*IST - 6) program. The program assisted the researcher with the storing, coding, retrieving, comparing, and grouping the data (Patton, 2002). The NUD*IST - 6 software program was chosen to aid in the management of the data because the program has the capacity to handle large files. Participants' responses to the open-ended question have been organized according to work setting for easy retrieval and management of raw data. The researcher searched the text for recurring words and patterns to uncover core consistencies and meaning from the text (Patton). From the data, themes and sub-themes were identified that were reflective of the respondents' experiences (Patton).

3. 9 Trustworthiness

The procedures outlined by Lincoln and Guba (1985) were used as the framework to evaluate the rigor and trustworthiness of the qualitative component of the present study. The framework suggested that the following four components be used as criteria for establishing trustworthiness of the qualitative data: credibility, dependability, confirmability, and transferability (Lincoln & Guba, 1985).

3.9.1Credibility

Credibility refers to the truthfulness of the data (Lincoln & Guba, 1985). Lincoln and Guba (1985) stated that credibility can be enhanced by ensuring the believability of the data and by outlining the steps the researcher has taken to demonstrate the credibility of the study. The researchers who designed *The Nature of Nursing Practice in Rural and Remote Canada* study ensured that the necessary steps were taken to produce credible

data. Because the survey questionnaires used for data collection in the study were written in both official languages the researchers had to make sure that the meaning of the questions were not lost during the translation of the questionnaire from English to French. To avoid potential threats to the credibility of the study an official translator was hired. Once the translation was completed, the survey was checked for consistency of meaning between both English and French languages (Stewart et al., 2005). A pilot test was conducted with 11 bilingual RNs who reviewed the survey for clarity and word choice. One of the 11 reviewers had previous experience with translating licensing examinations for the Canadian Nurses Association; in this case the reviewer critiqued both the English and the French versions of the questionnaire. Finally, all of the feedback obtained during the review process was examined by the survey team and the official translator before the French version of the questionnaire was finalized. To ensure the meaning and the richness of the data were not lost during the data entry phase, the responses to the open-ended questions were translated into English prior to the data entry. The responses were entered verbatim (Stewart et al.).

In the present study, the researcher used peer debriefing and investigator triangulation to further enhance the credibility and trustworthiness of the study (Lincoln & Guba, 1985). The researcher's thesis supervisor took part in peer debriefing during the review and exploration of the qualitative data. The process of peer debriefing helped the researcher identify potential biases and ensured nothing was overlooked (Lincoln & Guba). Written records from the peer debriefing sessions were kept for the purpose of the audit trail (Lincoln & Guba). An audit trail is the detailed account of events

(i.e., methods, decisions, conceptualizations and conclusions) the original researcher has recorded and allows a second researcher to review this information to arrive at similar conclusions of the original researcher (Burns & Grove, 2005; Lincoln & Guba). During the analysis process the participants' words were used to code and organize the data. Once the data analysis was completed by the present researcher the findings were compared and contrasted with the findings of a previous analysis of data based on the open-ended written response to the same question by participants who were practicing in small urban and rural settings.

3.9.2 Dependability and Confirmability

Dependability is the process by which the researcher accurately and adequately documents changes and occurrences in the phenomena being studied and the research design (Lincoln & Guba, 1985). Confirmability refers to the neutrality or objectivity of data characteristics (Lincoln & Guba). Dependability and confirmability were established in the present study by the development of an audit trail (Lincoln & Guba). Raw data (i.e., completed questionnaires and transcripts) have been kept. The researcher also created memos to record concepts, hunches, themes, definitions, and relationships that emerged (Lincoln & Guba). Memoing during the data analysis process also helped reduce researcher bias by allowing the researcher to express her feelings and observations so that she did not impose her beliefs on what the participants had said. The researcher recorded changes in the emerging data (i.e., codes, sub-themes, and themes) during the data analysis process and during peer debriefing meetings. The audit trail produced would allow an external reviewer to assess the trustworthiness and believability of the qualitative inquiry (Lincoln & Guba).

3.9.3 Transferability

Lincoln and Guba (1985) defined transferability as the extent to which the findings of the qualitative inquiry can be transferred to another sample or setting. The researcher in the present study ensured that the sample, setting, and data collection analysis processes were identified and described in detail (Lincoln & Guba, 1985). Providing sufficient information and a thick description (a detailed explanation that allows others to decide whether the study is applicable or meaningful in different contexts outside of the present study) will help the reader understand the findings of the study (Lincoln & Guba).

3.10 Reliability and Validity

In the original study, many steps were taken to ensure quality data were generated. To monitor and reduce errors during the data entry process, 10% of the questionnaires were double-entered (Stewart et al., 2005). Inconsistencies between entries were resolved by referring back to the original questionnaire (Stewart et al.). Frequency runs were used to check for data entry errors (i.e., strange values and logical inconsistencies) (Stewart et al.). The errors were resolved by comparing the entered values against the original questionnaires (Stewart et al.).

As previously discussed, the modified IWS subscales demonstrated acceptable levels of internal consistency when compared to other studies (Stamps, 1997). Because the sample of RNs who were categorized as practicing in NP roles and non-NP roles represent two homogenous groups (based on the five criteria outlined in the CNPI recommended role description and definition of NPs), further reliability testing of the modified IWS was performed as part of the present study. The reliability coefficients of

the NP group, non-NP group, and full sample are reported in Table 2. The alpha coefficients of the autonomy, pay, organizational policy, and 30-item scales were consistent with the findings of the original study (see section 3.5) (Stewart et al., 2005). The alpha coefficient of the professional status scale were lower (see Table 2) than the original study (alpha = .62), but findings were consistent with the reliability coefficients produced in other studies (alpha = .29 - .76) (Stamps; Stewart et al.). Lower reliability coefficients were produced by the autonomy scale in the present study (see Table 2) and the original study (alpha = .66) when compared to previous studies that use the autonomy scale (alpha = .69 - .76) (Stamps; Stewart et al.). Future researchers should use the modified version of the IWS with caution, particularly when measuring autonomy and professional status of rural and remote RNs practicing in NP and non-NP roles.

Table 2. Reliability Coefficients of the Modified Index of Work Satisfaction (IWS) Scale for the Present Analysis

	NP Group (n = 327)	Non-NP Group (n = 1,151)	Full Sample (n = 1,478)
Scale Item	alpha	alpha	alpha
Autonomy	.64	.65	.64
Professional Status	.49	.56	.57
Pay	.89	.90	.90
Organizational Policy	.73	.76	.75
30-Item Scale	.87	.88	.86

The questionnaire tool used in *The Nature of Nursing Practice in Rural and Remote Canada* was designed by the original researchers to reflect issues most relevant to RNs practicing in rural and remote settings in Canada (Stewart et al., 2005). Because there was very little previous research or theory on rural and remote nursing practice and

work life, the expert knowledge of the Survey Investigator Team, the Principal Investigators, and the 39 investigators and decision-makers who comprised the Advisory Team was drawn upon in the review of the content of the survey. Content validation was used to assess the relevance of the survey questions that inquired about issues that are relevant to the practice and work life of nurses in rural and remote settings in Canada. The experts concluded that the survey must incorporate the role the community plays in shaping the practice and work life of nurses practicing in rural and remote areas. Most of the previous research on nursing practice and work life has had an urban focus and the community was not recognized as an influencing factor (Stewart et al.).

Further content validity testing was conducted by pilot testing the seventh version of the survey questionnaire (Stewart et al., 2005). A convenience sample of RNs (n = 33) who were practicing or had recently practiced in rural and remote areas specializing in primary care, acute care, home care, community care, or long-term care were invited by their managers to complete a questionnaire. Participants were asked to evaluate the content, clarity, appearance, and length of the survey. Additional comments were also welcomed. Overall, the majority of the comments were positive (67%) and the majority of respondents (67%) stated that the questions in the survey were relevant to their nursing practice and work life. Feedback from the pilot test was reviewed by the research team. Further revisions were made to the questionnaire and when consensus was reached it was finalized (Stewart et al.)

CHAPTER 4

RESULTS

A non-equivalent comparison group design was constructed (Shadish, Cook & Campbell, 2002, p. 125) in the present study to compare similarities and differences of RNs whose practice roles were categorized as NP versus non-NP. The two groups of RNs (NP vs. non-NP) differed on the five criteria based on the recommended role description and definition of NPs outlined by the Canadian Nurse Practitioner Initiative (CNPI) (2006). Hence, the groups were non-equivalent on the variable of interest, the NP role. The RNs' responses to the survey questions inquiring about nursing practice (Appendix B, Questions E1 and E3) were used to group the participants in either NP or non-NP roles. The data that were selected from the Nursing Practice section of the survey were reflective of the CNPI role description and definition of the NP. Prior to hypothesis testing, descriptive statistical tests were conducted and comparisons between the groups were made on individual, work environment, and community variables.

4.1 Individual Variables

4.1.1 Gender

Of the participants in the present study, 1,404 (95.2%) were female and 71 (4.8%) were male. In the NP group, 43 (13.2%) were male compared to 28 (2.4%) in the non-NP group. Crosstabulation of gender and role (NP vs. non-NP) revealed that a larger proportion of males than females were practicing in NP roles compared to non-NP roles [Chi-Square (1, N = 1475) = 61.76, $p < .001$] (see Table 3).

Table 3. Gender of RNs in NP vs. Non-NP Roles

	NP Group		Non-NP Group		
Variable	*n*	(%)	*n*	(%)	Chi-Square*
Female	283	(86.8)	1,121	(97.6)	61.76, ($p < .001$)
Male	43	(13.2)	28	(2.4)	
Total**	326	(100.0)	1,149	(100.0)	

*Reported with continuity correction.
**Due to missing values the total does not equal the full sample size.

4.1.2 Educational Preparedness

A summary of the highest level of education attained by RNs in NP versus non-NP groups can be found in Table 4. Very few of the participants reported completing a Graduate Degree in Nursing as their highest level of education attained. A larger proportion of RNs in the NP group reported obtaining a Graduate Degree in Nursing compared to the RNs in the non-NP group. In the NP group, a larger proportion of RNs had either an Advanced Nurse Specialist or NP Diploma compared to RNs in the non-NP group. Similarly, a larger proportion of the NP group reported having a Bachelor's Degree in Nursing compared to RNs in the non-NP group. In both the NP and non-NP groups most of the RNs specified a Diploma in Nursing as their highest level of education obtained.

4.1.3 Region of Practice

The provinces and territories that the RNs resided in were categorized into the same five regions as in the original survey conducted by Stewart et al (2005). The sample of RNs represented all regions of Canada. The RNs in the NP and non-NP groups were distributed across all provinces and territories (see Table 5). However, the number of RNs in NP versus non-NP groups varied across the country.

Table 4. Highest Level of Education Attained by RNs in NP vs. Non-NP Roles

	NP Group		Non-NP Group	
Variable	*n*	(%)	*n*	(%)
Educational Preparedness				
Graduate Degree	15	(4.6)	7	(0.6)
NP Diploma/Advanced Nurse Specialist	79	(24.2)	25	(2.2)
Bachelor's Degree	99	(30.4)	198	(17.3)
Diploma	133	(40.8)	915	(79.9)
Total*	326	(100.0)	1,145	(100.0)

*Due to missing values the total does not equal the full sample size.

At the national level, 327 RNs (22.1%) fit the set criteria for the NP group compared to 1,151 RNs in the non-NP group (77.9% of the total sample of the 1,478 in the present analysis). Across the regions, the largest number of RNs in the NP group resided in the Territories and the smallest number reported residing in the province of Quebec (see Table 5). The largest number of RNs in the non-NP group resided in the Atlantic provinces and very few RNs in the non-NP group reported residing in Ontario.

Table 5. Provinces and Territories of Residence of RNs in NP vs. Non-NP Roles

	NP Group		Non-NP Group	
Variable	*n*	(%)	*n*	(%)
Region of Practice				
Atlantic Provinces	28	(8.6)	398	(34.6)
Quebec	21	(6.4)	113	(9.8)
Ontario	59	(18.0)	85	(7.4)
Manitoba/Saskatchewan	71	(21.7)	244	(21.2)
Alberta/British Columbia	54	(16.5)	212	(18.4)
Territories Yukon/NWT/ Nunavut	94	(28.8)	99	(8.6)
Total	327	(100.0)	1,151	(100.0)

4.1.4 Area of Practice

The majority of RNs in the NP group (68.7%) reported spending the most of their time practicing in either primary care settings or community health settings (see Table 6). In contrast, the majority of RNs in the non-NP group reported acute care or long-term care as the current practice area in which they spent the most of their time.

Table 6. Area of Practice of RNs in NP vs. Non-NP Roles

	NP Group		Non-NP Group	
Variable	*n*	(%)	*n*	(%)
Area of Practice				
Acute care	54	(17.2)	559	(49.2)
Long term care	0	(0.0)	294	(25.9)
Community health	89	(28.3)	39	(3.4)
Home care	4	(1.3)	90	(7.9)
Primary care	127	(40.4)	23	(2.0)
Administration/ Education/Research	31	(9.9)	89	(7.8)
Other	9	(2.9)	42	(3.7)
Total*	314	(100.0)	1,136	(99.9)**

*Due to missing values the total does not equal the full sample size.
**Due to rounding the total does not equal 100.0%.

4.1.5 Age

The ages of RNs in the full sample for this analysis ranged from 21 to 74 years. Registered nurses in the NP group (n = 319, M = 44.81 years, SD = 10.39 years) did not differ in age from the RNs in the non-NP group (n = 1139, M = 44.11 years, SD = 9.72 years). An independent t-test indicated that there was not a statistically significant difference in age between RNs in NP versus non-NP groups, $t(1456) = -1.13$, $p = .26$ (two-tailed).

4.1.6 Years of Practice

The RNs' reported years of practice ranged from 1 to 50. Registered nurses in both the NP (n = 321, M = 19.12, SD = 10.77) and non-NP (n = 1144, M = 19.82, SD = 10.11) groups reported practicing for similar lengths of time. No significant differences were observed between the mean number of years practiced for the two groups, $t(1463) = 1.08$, $p = .28$ (two-tailed).

4.2 Work Environment

4.2.1 Job Satisfaction

The first hypothesis predicted that RNs in the NP group would be more satisfied with their jobs compared to RNs in the non-NP group. Results of a one-way ANOVA comparing the NP (n = 323, M = 143.41, SD = 21.72, range: 83-205) and non-NP (n = 1,116, M = 139.10, SD = 23.06, range: 60-205) groups on the 30-item modified Index of Work Satisfaction Scale (Stamps, 1997; Stewart et al., 2005) (Appendix B, Question F1-30) supported the hypothesis (see Table 7). According to the descriptors of the modified IWS, RNs in both groups were 'mildly or somewhat' satisfied with their jobs.

Table 7. Analysis of Variance for Job Satisfaction

Source	Sum of Squares	*df*	Mean Square	f	*p*
Between Groups	4,662.31	1	4,662.31	8.99	.003
Within Groups	744,982.55	1437	518.43		
Total	749,644.86	1438			

4.2.2 Intrinsic and Extrinsic Work-Related Variables

Two new subscales were created for this analysis from four subscales of the modified Index of Work Satisfaction (Appendix B) to represent Herzberg's (1966) intrinsic factors (i.e., autonomy + professional status) and extrinsic factors (i.e., pay + organizational policy) of job satisfaction. The five items from the autonomy subscale and the five items from the professional status subscale were summated to create the intrinsic subscale for this analysis. Similarly, the pay and organizational policy subscales were summated to form the 10-item extrinsic subscale. When the intrinsic and extrinsic subscales were summated, possible scores for each scale ranged from 10 to 70. Higher scores represented higher levels of job satisfaction for both the intrinsic and extrinsic work-related variables.

Table 8 presents the mean scores and standard deviations of the NP and non-NP group on the intrinsic and extrinsic subscales. The mean score on the intrinsic subscale for the full sample of NPs and non-NPs was 53.90 (n = 1,439, SD = 7.62, range: 23-70), which revealed that, overall RNs in the full sample of NPs and non-NPs were 'mildly or somewhat' satisfied with the intrinsic work-related variables**.** The mean score on the extrinsic subscale for the full sample of NPs and non-NPs was 35.55 (n = 1,439, SD = 11.53, range: 10-68), which indicated that RNs in the full sample of NPs and non-NPs were 'mildly to somewhat' dissatisfied with the extrinsic work-related variables.

Table 8. Mean Scores on the Intrinsic and Extrinsic Subscales of RNs in NP vs. Non-NP Roles

	NP Group *n* = 323		Non-NP Group *n* = 1,116		Full Sample *n* = 1,439	
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*
Intrinsic Subscale	56.75	6.68	53.07	7.68	53.90	7.62
Extrinsic Subscale	34.59	11.53	35.83	11.53	35.55	11.53

One-way ANOVA was used to compare the mean scores of NP and non-NP groups. Table 9 shows the results for the comparison of participants' mean scores on the intrinsic subscale (i.e., autonomy + professional status). Table 10 shows the results for the comparison of participants' mean scores on the extrinsic subscales (i.e., pay + organizational policy). As predicted in the second hypothesis, the mean score on the intrinsic subscale was significantly higher for the NP group compared to the non-NP group (see Table 8 and Table 9). Although the mean score on the extrinsic subscale was slightly lower for the NP group (see Table 8 and Table 10), the difference was not statistically significant.

Table 9. Analysis of Variance for Intrinsic Work-Related Factors

Source	Sum of Squares	*df*	Mean Square	f	*p*
Between Groups	3,385.42	1	3,385.42	60.66	.000
Within Groups	80,195.73	1,437	55.81		
Total	83,581.16	1,438			

Table 10. Analysis of Variance for Extrinsic Work-Related Factors

Source	Sum of Squares	*df*	Mean Square	f	*p*
Between Groups	386.36	1	386.36	2.91	.09
Within Groups	190,840.03	1,437	132.80		
Total	191,226.39	1,438			

4.3 Community Variables

4.3.1 Satisfaction with Home Community

Registered nurses in the NP group (n = 311, M = 36.52, SD = 8.85) were less satisfied with the community they resided in compared to the non-NP group (n = 1115, M = 39.86, SD = 7.52). Statistical testing indicated a significant difference between the two groups, $t(1424) = 6.64$, $p = .000$ (two-tailed). The mean scores indicated that RNs in NP and non-NP groups were 'mildly' satisfied with their home communities.

4.3.2 Satisfaction with Work Community

Even though both the NP and non-NP groups' mean scores revealed that they agreed with the statement 'I am happy with the community in which I work', RNs in the NP group (n = 319 M = 3.50 SD = .72) were not as happy as their non-NP counterparts (n = 1128, M = 3.67, SD = .64) and a statistical significant difference was found between the NP and non-NP groups, $t(1445) = 4.02$, $p = .000$ (two-tailed).

4.4 Content Analysis of NPs' Responses to Open-ended Survey Question Addressing the Importance of Work-Related Attributes

Of the 327 RNs in the NP group, 321 responded to the open-ended survey question 'What is the most important thing to you about your nursing position?' (Appendix B, Question G16). A content analysis of the responses to this question was

conducted to identify themes using NUD*IST-6 qualitative software program to assist with data management. The RNs who responded to the question identified at least one attribute that was the most important to their nursing position, but some respondents listed multiple attributes; therefore, the responses to this question were coded under more than one theme. Five themes (see Table 11) were identified from the analysis of the open-ended survey question addressing the importance of work-related attributes:

- The Nature of Advanced Nursing Practice in Rural and Remote Areas
- Work Life
- Personal and Professional Development
- Practice Philosophy
- The Community

All themes and sub-themes presented are illustrated with quotations provided by the respondents to the survey.

4.4.1 The Nature of Advanced Nursing Practice in Rural and Remote Areas

The theme 'The Nature of Advanced Nursing Practice in Rural and Remote Areas' reflects the unique opportunity RNs are challenged with when practicing in extended roles. The respondents outlined the importance of having the skills and knowledge base that comes with working in an advanced practice role and being exposed to a variety of nursing practices and procedures in rural and remote areas. Registered nurses practicing in NP roles also valued the autonomy that comes with practicing in an advanced role. The sub-themes that relate to 'The Nature of Advanced Nursing Practice in Rural and Remote Areas' were: 'autonomy,' 'the work role,' 'variety,' and 'job satisfaction.'

Table 11. Themes and Sub-themes from Content Analysis of the Survey Question

Themes	Sub-themes
The Nature of Advanced Nursing Practice in Rural and Remote Areas	Autonomy The Work Role The patients Skills and knowledge requirements Variety Job Satisfaction
Work Life	Social/Environmental Factors Support and collaboration Interpersonal relationships Workload Work schedules and getting time off Having the time and resources Pace of work Administrative Factors Leadership and policy Pay and compensation Personal Factors Flexibility Family
Professional and Personal Development	Growth Learning Opportunity Challenge Making a difference Recognition
Practice Philosophy	Principle of Primary Health Care Primary health care Holistic care Continuity of care Quality Improvement Safety Quality care Patient satisfaction Caring Patient Centered Care
The Community	Health of the Community People of the Community Location

4.4.1.1 Autonomy

Registered nurses in NP roles addressed the concept of autonomy, decision making, and responsibility as being important factors in their practice. The sub-theme 'autonomy' refers to the power of self-direction that RNs are permitted in directing and managing patient care in rural and remote areas. The RNs identified the importance of freedom and independence in their nursing position, specifically in terms of their responsibility and decision making authority.

- "Autonomy and the ability to help others with life changing decisions."
- "The freedom and latitude that I have. . . .
- "Independence, ability to work alone and decision making about assessment, Dx [diagnosis], Tx [treatment] and follow-up."
- "Independent decision making relative to my professional skills . . . ."
- "The autonomy gained in this type of advanced practice position and keeps me intellectually stimulated."
- "The autonomy to make clinical decisions that is not offered in the hospital."
- "Independence and ability to use own judgment in all situations."
- "Independence and autonomy to decide care and concomitant responsibility. . . ."

4.4.1.2 The Work Role

The sub-theme 'the work role' included the practices and procedures the RN is assigned or expected to or fulfill as part of the role. The phrases pertaining to the work role were organized under 'the patients' and 'skills and knowledge requirements.'

4.5.1.2.1 The patients. This code pertains to the statements RNs made when they mentioned the individual patient or client as the most important aspect of their nursing practice. The responses that addressed direct patient care or taking care of the patient were also coded under 'the patients.'

- "The clients."
- ". . . . The population I provide service to."
- "My love for clients I care for and assist with their health care."
- "Taking care of the sick."

4.4.1.2.2 Skills and knowledge requirements. The responses coded under 'skills and knowledge requirements' referred to the importance RNs place on their ability to conduct nursing practices and procedures gained through education, training, and experience in a proficient and competent manner. The code 'skills and knowledge requirements' included aspects of patient education, empowerment, management, assessment, diagnosis, treatment, skill development, expertise, and concepts of critical thinking.

- ". . . creatively using my personal and professional skills to teach/empower clients to be healthy."
- "To work myself out of a job. If I can empower the community to look after itself in greater, sustaining ways, I will have succeeded."
- "Requires skill in taking adequate health history, performing physical exams, and making diagnosis. These factors determine how a particular situation will be managed."
- "Skill and expertise development. . . ."

- "The ability to use a variety of skills and be required to use critical thinking and act on it in a primary care role."

4.4.1.3 Variety

The sub-theme 'variety' emerged during the analysis of RNs' responses regarding the most important attribute of their nursing position. Many of the respondents identified the diverse assortment of work they are presented with opposed to mundane tasks they are expected to carry out on a routine basis.

- ". . . The unpredictability of the daily schedule that I have."
- "The diversity of work, diversity of skills practiced and required."
- "Variation in the breadth and scope of practice. . . ."
- "To be able to be an administrator and also do clinic in the same day. I like to see patients and keep my nursing skills up and I also like administration work."
- "Diversity- intervention is not often routine. We do not get bored at work because of the varied hours."
- "Variety; in age group of clients, in types of problems, in services provided. . . ."

4.4.1.4 Job Satisfaction

The sub-theme 'job satisfaction' captures the importance RNs place on enjoying the work that they do. Job satisfaction is the contentment RNs feel within their current position. This sub-theme highlights the essence of the nature of advanced nursing practice in rural and remote areas. Some respondents used the words love, satisfaction, enjoy, and happy to describe their feelings of job satisfaction.

- ". . . Working in northern communities is tremendously satisfying . . . ."
- "Helping people with problems- physical or mental. Nursing provides more personal satisfaction than any other profession."
- "That I really enjoy what I do and who I work with."
- ". . . .Job satisfaction due to the range of demands on my qualification. . . . ."
- ". . . . Satisfaction in making the right dx [diagnosis] and starting appropriate tx [treatment]."
- "I really enjoy my patients, they make my job happier . . . ."

4.4.2 Work Life

The theme 'Work Life' included the sub-themes 'social/environmental factors,' 'workload', 'administration factors' and 'personal factors.' These sub-themes emerged as important aspects within the work life of RNs practicing in NP roles in rural and remote areas of Canada.

4.4.2.1 Social/ Environmental Factors

'Social/environmental factors' was used to describe responses that referred to the variety of individuals, disciplines, and sectors the RNs interact and collaborate with. The sub-theme 'social/environmental factors' includes aspects of team work, but more specifically, 'support and collaboration' and 'interpersonal relationships.' The following phrases depict the important role social/ environmental factors play in the RNs' work lives.

4.4.2.1.1 Support and collaboration. The RNs' responses that were coded as 'support and collaboration' reflected the importance of emotional support and working together across disciplines.

- Providing the best care possible in a supportive environment."
- "Team work and collaboration."
- ". . . working in a team in collaboration with different disciplines."
- "That I work independently, but have the support and collaboration with the physicians in this practice."

4.4.2.1.2 Interpersonal relationships. Responses that were coded under 'interpersonal relationships' included all the phrases that made reference to interactions, relationships, communication, and respect.

- "The interaction with people, patients, colleagues, and the public."
- "Satisfying interactions with clients . . . Strong positive work relationships with co-workers."
- "Communication."
- "Respect from administration, colleagues, clients."

4.4.2.2 Workload

The 'workload' sub-theme was identified from the RNs' responses that addressed nursing workload and productivity, specifically, 'work schedule and getting time off,' 'having the time and the resources,' and 'pace of work.' The RNs' workload influences their ability to function or perform as expected in their given role.

4.4.2.2.1 Work schedule and getting time off. The code 'work schedule and getting time off' reflects the importance of hours worked by RNs and the time off they are allocated.

- "Work satisfaction and getting time off (work 6 weeks and off 2 weeks)."

- "I work by contract/term, when I want and usually where I want. I take time off for Christmas and New Years for a month and 2-3 months in the summer."
- "I choose when and where I work and the length of time I work."

4.4.2.2.2 Having the time and the resources. This code was used to describe the importance of RNs having enough time in a day to spend with their patients and having the resources (i.e., human resources and medical equipment) to perform well in their roles.

- "Having time and resources to do the job as it should be done."
- "Not enough staff. . . ."
- "Providing health care to a community which does not have state of the art medical resources or personnel."
- "I get to spend as much time as I think is needed to improve/solve a problem for a client. . . ."

4.4.2.2.3 Pace of work. The responses that mentioned how slow or fast RNs were expected to conduct the duties of their role were coded under 'pace of work.'

- "Remote; slower pace, work with First Nations."
- "I feel I am more personally rewarded more in remote areas than in larger hospitals where often nurses are 'expected' to be doing 100 given tasks."

4.4.2.3 Administrative Factors

The sub-theme 'administrative factors' was used when respondents mentioned events or aspect of their nursing role that were ultimately influenced by administration.

For example, ‘leadership and policy,’ ‘pay and compensation,’ and ‘job security’ were identified by some RNs as the most important attribute of their nursing position.

4.4.2.3.1 Leadership and policy. Answers were coded under ‘leadership and policy’ when RNs made reference to the importance of administrative duties and practice guidelines or policies.

- Trying to help organize a workable system for both, the patients and the nurses, evidence based in both clinical and administrative areas.”
- “Practicing within guidelines and protocols to reassure safety of community health needs of the people. Limit unsafe nursing practice.”
- “The security that comes with the knowledge that all care givers operate under the same directions of the administrator.”

4.4.2.3.2 Pay and compensation. Respondents who mentioned any series of events that were related to pay as playing a role in the most important aspect of the RNs nursing position were coded under ‘pay and compensation.’

- “Getting pay check. . .”
- “It is important that I get paid quicker; more monitoring of wage increments.”
- “ . . .paper work etc. has to be done after hours which we aren’t compensated for.”

4.4.2.4 Personal Factors

The sub-theme ‘personal factors’ was used to describe the individual’s needs and desires as being influential in one’s work life. Two codes emerged during the analysis, and include ‘flexibility’ and ‘family.’

4.4.2.4.1 Flexibility. The statements that were coded under 'flexibility' implied that the RNs' jobs allow them the opportunity to move freely within their roles or enable them to complete personal tasks outside of the work role. The RNs' statements implied that flexibility granted them increased control over the work role.

- "The autonomy and flexibility. . . ."
- ". . . allows me flexibility to work 8 months and go home every summer for 4 months."
- "Offers flexible work time for me."

4.4.2.4.2 Family. Responses that reflected the importance of balancing family obligations and work life were coded under 'family.' Many of the respondents who identified 'family' as the most important aspect of their nursing position also mentioned the hours they worked.

- "8 hour day enabling me to spend time at home with my children."
- "I like working for two months and then having time off to spend with my family."

4.4.3 Personal and Professional Development

The theme 'Personal and Professional Development' stemmed from the three sub-themes relating to 'growth,' 'making a difference,' and 'recognition.' The 'Personal and Professional Development' theme includes the individuals' ability to advance their skills in their personal and professional lives by learning a new skill or acquiring a new perspective offered by a variety of opportunities and challenges they are faced within their work roles. 'Personal and Professional Development' also includes seeing the

results of one's work through verbal recognition or the feeling like one has made a difference through his or her work.

4.5.3.1 Growth

The sub-theme 'growth' includes events the RNs have identified as advancing their skills or acquiring a new perspective in regards to their professional development. The events were coded as follows: 'learning,' 'opportunity,' and 'challenge.'

4.4.3.1.1 Learning. This code stresses the importance RNs place on continuing education and the role it plays in skill development. The statements made by RNs also communicate nurses' passion for knowledge and the value they place on life long learning.

- "I have learned a lot working in Northern communities."
- "I get to see more of the total picture. I also get to see if my diagnosis and treatment really works. I also get to see some of my mistakes and learn that I won't do that again."
- "Necessity to be alert to learning opportunities."
- "Requirement for continual learning. Development of skills."
- "Although my job can be stressful at times, I enjoy it very much. The most important aspect about my position is the fact that I have to continue learning new things and I am given the opportunity to do so."

4.4.3.1.2. Opportunity. The code 'opportunity' reflects the possibilities that are offered to RNs who practice in NP roles. Many of the respondents made reference to the opportunities they have because their role allows them to work to full scope.

- "I love the opportunity to use all the nursing skills and theory. . . ."

- "The chance to use nursing skills and knowledge as we are expected to."
- ". . . the chance to convey my enthusiasm about the role of northern primary health care nurse practitioner."
- "The chance for one to work as a N.P. in a clinical setting. I am unable to do this in Ontario."

4.4.3.1.3 Challenge. This code contains the responses of the RNs who identified that being challenged was an importance attribute of their nursing position. Many of the RNs emphasized the challenge of advanced practice and the challenge of the variety of work they are faced with when working in an NP role.

- "Work satisfaction is high because I enjoy the challenge of primary health care (diagnosis/treatment) requiring a high level of skill and independent decision making."
- ". . . I enjoy the challenges and independence of advanced practice."
- "challenge of different daily presenting cases."

4.4.3.2 Making a difference

The sub-theme 'making a difference' portrays the accomplishment RNs felt by making an impact in their workplace. The theme 'making a difference' also reflects the RNs' need to feel like they contribute to the well being of others.

- ". . . making changes that make a difference."
- ". . . I feel my work makes a difference in peoples' lives. . . ."
- "The 'treasured' opportunity to make a difference in the lives of First Nations persons by 'hearing what they are really saying' using each nurse/client

interaction for health teaching that is relevant to their particular circumstances."

- ". . . feeling that what we are doing is making a difference in the health/well being of the community."
- "Making a difference even if only minute. . . ."

4.4.3.3 Recognition

The sub-theme 'recognition' was used to describe RNs' feelings of being acknowledged and recognized for their work by others. Within the nursing profession the status of RNs is reflected in how they are portrayed by their colleagues and the greater public. The importance of recognition was evident in the respondents' statements and was measured by their feeling of appreciation and value of their work by others.

- "The recognition from the community that they are satisfied with my performance."
- "Recognition by physicians and administration. Job satisfaction- having the public recognize and appreciate what we do. However they can only do that if the public knows what we are responsible for."
- "The Inuit people are very appreciative and grateful for the care we give them and always say 'thank you in their own language: 'Koana'."
- ". . . I feel appreciated even though I rarely receive a 'thank you'."

4.4.4 Practice Philosophy

The theme 'Practice Philosophy' includes sub-themes that capture the art and science of nursing. The practice philosophies of the RNs practicing in NP roles have

been portrayed as a complex system of beliefs, which includes, 'principles of primary health care,' 'quality improvement,' 'caring,' and 'patient centered care.'

4.4.4.1 Principles of Primary Health Care

Many of the RNs listed attributes of primary health care in response to the open-ended question addressing the most important thing about their nursing practice. Primary health care includes all services that play a role in health, including factors associated with income, housing, education, and the environment. Primary health care includes services aimed at health promotion, illness, and injury prevention, and the diagnosis and treatment of illness and injury (Health Canada, 2004). The sub-themes that were identified during the analysis included the following principles of primary health care: 'primary health care,' 'holistic care,' 'continuity of care,' and 'patient centered care.'

4.4.4.1.1 Primary health care. The code 'primary health care' included all statements that made mention of health promotion/prevention and curative care. It was more common for the responses to include health promotion and health prevention compared to curative care.

- "Health education; prevention."
- "promotion of health, education of the clientele"
- "the patient and curative care."
- "to be able to provide curative and preventative measures in the same day."

4.4.4.1.2 Holistic care. The code entitled 'holistic care' describes the comprehensive care of patients that considers their physical, emotional, social, and spiritual needs. Holistic care plays an important role in primary health care as there is no "one size fits all" model to provide health care services. A holistic approach of health

care delivery enables RNs and other health care providers to discover a "best fit" model to addressing primary health care by including all dimensions of an individual and/or community.

- "Being able to provide ongoing health care for people, assisting them to access necessary resources, providing continuity and coordination of their health care needs; physical, social and emotional."
- ". . . Ability to coordinate holistic care."
- ". . . . Managing emergencies and being involved with the total range of health care from initial diagnosis to resolution of the problem and everything in-between . . . ."

4.4.4.1.3 Continuity of care. This code was used to describe the sequence of events that address the coordination of care and includes the concepts of arranging care (i.e., follow-up care and performing appropriate tests), which may not be routine or typical of the health care provider who is arranging the care of the individual and/or community.

- ". . .follow up clients."
- "Ability to follow patients through from initial contact to improvement or evacuation and perform all tests that are needed."
- ". . . able to follow clients' care from beginning to end of each condition or illness."

4.4.4.2 Quality Improvement

The theme 'quality improvement' is an overarching term used to describe measures taken by an organization to increase the efficiency and efficacy of health care

for the patient, health care providers, and organization. Quality improvement initiatives focus on preventing errors from reaching the patient by taking a systems approach to prevent adverse events from occurring. Quality improvement addresses factors such as safety, best practice, and patient satisfaction. The RNs' responses to the open-ended question revealed that they valued the importance of 'safe/competent care,' 'quality care,' and 'patient satisfaction,' which are also part of quality improvement.

4.4.4.2.1 Safe/competent care. The code was used only when respondents mentioned the words 'safe' or 'competent' when describing health care delivery. Only one respondent mentioned a specific event (i.e., medications) that corresponded with safety and competency.

- "To provide safe advanced practice care."
- "Safety for my clients."
- "Safe provision of primary health services."
- ". . .being current in all medications."
- "Able to practice as a competent caring nurse. . . ."

4.4.4.2.2 Quality care. The code 'quality care' was used when respondents referred to quality of care, excellence, evidence based care, and best care as being the most important attribute of their nursing position.

- "Providing high quality of care and assessments, preventing mistakes and over sights. . . ."
- "Providing the best care possible. . . ."
- ". . .evidence based in both clinical and administrative areas."
- "To give excellent care to the community members. . ."

4.4.4.2.3 Patient satisfaction. Responses of RNs who identified events of patient gratification as being the most important attribute of their nursing position were coded under 'patient satisfaction.'

- "Patient satisfaction."
- "To satisfy the people or patients."

4.4.4.3 Caring

Responses that reflected the RNs' devotion to human welfare and emphasized the role caring/helping plays in the nursing profession were coded under the sub-theme 'caring.'

- "Helping others, . . . "
- "Able to provide comfort, care and compassion to my patients and their families while meeting the demands they physically require."
- "the human dimension . . . my clientele permits me to care for all human aspects."

4.4.4.4 Patient Centered Care

The sub-theme 'patient centered care' describes the concept of putting patient needs first and foremost during the planning, implementation and evaluation of health care services.

- ". . . individualizing care for people."
- "Responding to the distinct needs of the variety of clients."

4.4.5 The Community

'The Community' theme contained the following sub-themes: 'health of the community,' 'people of the community,' and 'location.' These sub-themes addressed the

importance of community life for RNs practicing in NP roles in rural and remote areas of Canada.

4.4.5.1 Health of the Community

'Health of the community' was used when respondents mentioned that the most important thing about their nursing practice was to provide health care services to the community or when they mentioned the health status or needs of the community.

- "Assure that professional nursing/medical care is delivered to my community."
- ". . . providing integrated services to people in the north. . . ."
- ". . . keep focus on health of the community."
- "The freedom to design and carry out community health programs based on the specific needs of the community."

4.4.5.2 People of the Community

Respondents' statements that identified the individuals of the community as the most important thing about their nursing practice were coded under 'people of the community.'

- "Contact daily with the community members."
- ". . . Getting to know and understand the community. . . ."
- "Support and appreciation from the community."

4.4.5.3 Location

The phrases were coded 'location' when respondents made reference to the physical environment as being the most important thing about their nursing practice.

- ". . . the location in which I live."

- "Enjoy working in a northern isolated community. . . ."
- "The freedom to travel. See Canada from a different perspective than urban nurses. Meeting the people. The scenery. Learning about the First Nations. The weather. The terrific country we call Canada."
- "Providing primary health care to my own rural community. . . ."

4.4.6 Summary of Content Analysis

The five major themes identified in the content analysis were based on the responses by RNs categorized in the NP group, who answered the open-ended question 'What is the most important thing to you about your nursing position?' The purpose of including this question in the original survey (Stewart et al., 2005) (Appendix B) was based on the concern that the set of items derived from the urban, acute care RNs (Stamps, 1997) might not be inclusive of important aspects of nursing practice in rural and remote settings. The findings of the detailed analyses identified themes and sub-themes that are relevant to RNs practicing in NP roles in rural and remote settings in Canada. In the present content analysis the sub-themes were not reduced into broad categories because the knowledge gained might be useful for future instrument development or refinement of existing scale.

CHAPTER FIVE

DISCUSSION

The purpose of the present study was to describe similarities and differences between RNs whose practice roles were categorized as NPs versus non-NPs in rural and remote Canada in relation to job satisfaction and individual, work environment, and community variables. The results of the present analysis support the hypothesis that NPs practicing in rural and remote areas would report a higher level of job satisfaction, overall, than their non-NP counterparts. As predicted, the results further indicated that RNs practicing in NP roles would report a higher level of intrinsic job satisfaction (autonomy + professional status) compared to RNs practicing in non-NP roles. The findings of this secondary analysis raise questions regarding the current theory surrounding job satisfaction. This chapter will use the knowledge gained through the present analysis to critique the works of Herzberg (1966), Stamps (1997), and Misener and Cox (2001). Conclusions will be drawn about how similarities and differences between RNs practicing in NP versus non-NP roles relate to the present literature surrounding job satisfaction. At the end of this chapter the implications and the strengths and limitations of the present study will be outlined, followed by suggestions for further research.

5.1 NP and Non-NP Participants

In the present study, only 51.5% of RNs employed in NP positions (86/167) regularly: (1) ordered diagnostic tests, (2) interpreted diagnostic tests, (3) prescribed medications, (4) facilitated health promotion activities in the community, and (5) performed procedures (i.e., suturing and pap smears) as part of their current practice, even though these activities are central to the NP role description (CNPI, 2006). The remaining 69 RNs reported doing some, but not all of these nursing practice activities; however, the majority of RNs employed in NP positions were facilitating health promotion activities in the community. Findings of the present study confirm that RNs in NP positions have not been utilizing all of the skills they are expected to assume in an NP role. The results of this analysis are similar to the findings of Sidani, Irvine, and DiCenso (2000) who found only 10% of the Primary Care Nurse Practitioners in Ontario reported that they admitted patients to hospital when they had the authority to do so. However, the majority of NPs did report making medical diagnoses, ordering diagnostic tests, and prescribing medications (Sidani et al., 2000). Further research needs to be conducted on the implementation of the NP role to ensure that NPs are working to their full scope of practice and, if not, to identify barriers.

For the purpose of this study, two groups of RNs were selected from the national survey (Stewart et al., 2005) based on criteria developed from the CNPI (2006) recommended role description and definition of the NP role. This provided a comparison of RNs who met all of the criteria (NP group) with those who did not meet any of the criteria (non-NP group). The advantage of categorizing the RNs into NP and non-NP groups based on this procedure was to create homogeneous groups in relation to the best

Canadian benchmark for the role at this time. Registered nurses who reported their current position as Nurse Practitioner (Appendix B, Question B7) were not homogeneous in relationship to the criteria.

5.2 Individual Variables

In general, RNs in NP and non-NP groups were similar on some individual variables and differed on others. Registered nurses in the NP and non-NP groups were similar with respect to age and years practiced, but differed on gender, educational preparedness, province and territories of residence, and area of practice. The following section will describe similarities and differences between the NP and non-NP groups. Comparisons will also be made between the findings of the present analysis and findings in the existing literature on NPs and job satisfaction.

5.2.1 Similarities

5.2.1.1 Age

The ages of the RNs in NP and non-NP groups were similar. Statistical testing revealed that there was no significant difference in age between RNs in NP versus non-NP roles. Results on the mean age of the NPs are consistent with the findings of other North American studies that have been conducted on NPs and job satisfaction in 2000-2001 (Misener & Cox, 2001; Sidani, Irvine & DiCenso, 2000). These findings confirm that the mean age of NPs has risen over the years from the mid-thirties to mid-forties (Beal Steven, & Quinn, 1997; Koelbel, Fuller, & Misener, 1991; Sullivan, Dachetlet, Sultz, & Henry, 1978). The findings of more recent studies reflect the aging nursing work force (Misener & Cox, 2001; Sidani et al., 2000). More recent American studies conducted by Schiestel (2007) and Wild, Parsons, and Dietz (2006) found the largest

percentage of NPs were 40-51 years of age and 50-59 years of age, respectively. In a recent study conducted in Malaysia, the reported mean age of NP participants was 39.7 years (Kannusamy, 2006); however, this was accounted for by the difference in Asian and North American demographic make-up.

5.2.1.2 Years of Practice

There was no significant difference in years of practice between the NP and non-NP groups. Both groups reported practicing over 19 years. These results are similar to the mean years of practice found in a Canadian study that was conducted around the same time and which examined role satisfaction of Primary Care Nurse Practitioners in Ontario (Sidani et al., 2001). Similar studies have reported various years of practice ranging from less than 1 year of practice to 30 years of practice (Beal, Steven, & Quinn, 1997; Kacel, Miller, & Norris, 2005; Koelbel, Fuller, & Misener; 1991; Miller, Apold, Baas, Berner, & Levine-Brill, 2005; Todd, Farquhar, & Camilleri-Ferrante, 1998; Wild, Parsons, & Dietz, 2006).

5.2.2 Differences

5.2.2.1 Gender

The majority of the RNs in the NP group were female, which is similar to the previous research findings on NPs and job satisfaction in terms of gender (Kacel et al. 2005; Kannusamy, 2006; Koelbel et al., 1991; Miller et al., 2005; Misener & Cox; Schiestel, 2007; Sidani et al., 2000; Sullivan et al.. 1978; Todd et al., 1998; Wild, Parsons, & Dietz, 2006). The only Canada-wide data available on the distribution of rural and small town RNs were developed by a geographer (R. Pitblado), as part of *The Nature of Nursing Practice in Rural and Remote Canada* study (Stewart et al., 2005).

Data from the 2000 Registered Nurse Database were used and published by the Canadian Institute for Health Information (CIHI) (2002). In the 2002 report, 4.8% of RNs practicing in rural and small town Canada were male, which is identical to the proportion of men included in the full sample used in this analysis (71/1475, 4.8%). However, the group comparison design in the present study revealed a significantly larger proportion of men (13.2%) who reported practicing in NP roles compared to non-NP roles (2.4%) (see Table 3). Based on the CIHI (2002) report, in 2000 a larger proportion of female RNs resided in rural areas and small towns, with the exception of the Northwest Territories/Nunavut and Quebec, where the proportions of male RNs were larger. Findings of the present analysis indicate that 28% of RNs in the NP group resided in the Territories; whereas 9.8% of RNs in the non-NP group resided in the Territories (see Table 6). The present study did not examine the relationship between gender, region of practice, and practice role; further research would be needed to explain this phenomenon.

5.2.2.2 Educational Preparedness

The present study found that although there were very few RNs in the NP group (4.6%) who had obtained a graduate degree as the highest level of education, a larger proportion of NPs had a graduate degree compared to non-NPs (0.6%) (see Table 4). The CIHI (2002) report indicated that 2.9% of rural and small town RNs in Canada had obtained a graduate degree in nursing; whereas 6.3% of urban RNs had obtained graduate degrees. Similarly, in previous research on job satisfaction of NPs, the majority of NPs studied were not prepared at the graduate level (Beal et al.; Koelbel et al.; Sidani et al.; Sullivan et al.). However, Kacel, Miller, and Norris (2005) and Kannusamy (2006) found

that the majority of the NPs in their study were prepared at the master's level, but they also practiced in urban or suburban areas versus rural areas.

In the present study, the majority of RNs in both NP (71.2%) and non-NP (97.2%) groups had attained either a diploma or a degree in nursing as their highest level of education (see Table 4). The CIHI (2002) report indicated that, generally, rural RNs are less educated than their urban counterparts. However, it was further reported that a larger proportion of RNs in the Territories had attained bachelor's degrees compared to RNs in urban areas (CIHI, 2002). In the present study, fewer than 25% of RNs in the NP group had a NP diploma or Advanced Nurse Specialist certification compared to less than 2% of RNs in the non-NP group (see Table 4). In most of the previous research, NPs were found to have obtained additional training in advanced nursing practice that is a diploma, certificate, or a degree (Bullough, 1974; Kannusamy, 2006; Koelbel, Fuller, & Misener, 1991; Linn, 1975; Sidani, Irvine, & DiCenso, 2000; Sullivan, Dachelet, Sultz, & Henry, 1978; Todd, Farquhar, Camilleri-Ferrante, 1998).

5.2.2.3 Region of Practice

In the present study, a large proportion (94/327, 28.7%) of RNs in the NP group reported residing in the Territories and a small proportion (21/327, 6.4%) reported residing in Quebec (see Table 5). In contrast, the findings from the national survey based on the 167 RNs in NP position (Appendix B, Question B7) and published in a Fact Sheet by Stewart and MacLeod (2005, August) indicated a large proportion of NPs (42/167, 25.1%) resided in the province of Quebec. The discrepancy illustrates the lack of correspondence between job title and the behavioural aspects of the role. In the present study, participants were excluded if they had reported a variety of mixed responses to the

set of selected questions regarding practice activities (refer to section 3.3). Registered nurses who reported that their current position was NP included a mixed profile of role (i.e., some were not working to the full scope of the NP role). Based on the findings of both analyses, one could conclude that the RNs in the NP group who resided in the Territories had a broader scope of practice compared to RNs practicing in NP roles in the province of Quebec.

5.2.2.4 Area of Practice

The majority of RNs in the NP group reported spending most of their time practicing in either primary care or community health settings; whereas the majority of RNs in the non-NP group spent most of their time practicing in acute care and long term care. Registered nurses in the NP group were more community-based (including practicing in nurse clinics); whereas the non-NP group tended to be in institutions (including acute care hospitals and long-term care facilities). The literature on job satisfaction of NPs includes reports of NPs working in a number of practice areas including community (Sidani et al., 2000) and primary care settings (Koelbel et al., 1991), but also private medical practices (Schiestel, 2007), ambulatory care (Wild et al., 2006), and acute care areas (Kannusamy, 2006). Sidani et al. (2000) and Schiestel (2007) included the type of NP designation participants reported having, which were primary care nurse practitioners and adult nurse practitioners, respectively.

5.3 Work Environment

The findings of the present analysis revealed a number of differences between the RNs in the NP versus non-NP groups with respect to reported overall levels of job satisfaction and the intrinsic/extrinsic work-related factors related to job satisfaction. The

following section outlines the observed differences in the context of the existing theory and literature on NPs and job satisfaction.

5.3.1 Job Satisfaction

5.3.1.1 Hypothesis pertaining to the Overall Level of Job Satisfaction

Based on the review of the literature (Herzberg, 1966; Kacel, Miller, & Norris, 2005; Stamps, 1997), the first hypothesis stated that the reported overall level of job satisfaction would be higher for RNs whose practice roles were categorized as NP compared to RNs whose practice roles were categorized as non-NP. The results of the analysis support the hypothesis. The RNs in the NP group had significantly higher levels of overall job satisfaction than the RNs in the non-NP group. There has been no previous research on job satisfaction of NPs versus RNs in traditional nursing roles. In the present study, the average score of the overall level of job satisfaction indicated NPs were 'mildly to somewhat' satisfied with their jobs. In previous research, the overall level of job satisfaction of NPs varies from minimally satisfied (Kacel et al., 2005; Misener & Cox, 2001) to moderately satisfied (Bullough, 1974; Koelbel et al.; Linn, 1975).

In three American studies, NPs reported being highly satisfied with their jobs (Beal, Steven, & Quinn, 1997; Miller et al., 2005; Sullivan, Dachelet, Sultz, & Henry, 1978). The majority of the participants in these three studies were either neonatal nurse practitioners (Beal et al, 1997) or family nurse practitioners (Miller et al.; Sullivan et al., 1978). Beal et al. and Miller et al. did not state whether the sample of NPs in their studies practiced in rural or urban settings; however, Sullivan et al. reported that the sample of NPs in their study practiced in rural settings.

5.3.1.2 Hypothesis pertaining to the Intrinsic Work-Related Factors

Based on Herzberg's Motivation-Hygiene Theory (1966), the second hypothesis stated that the reported level of intrinsic job satisfaction factors (autonomy + professional status subscales from the Index of Work Satisfaction Scale) would be higher in RNs whose practice roles were categorized as NP compared to RNs whose practice roles were categorized as non-NP. The results of the analysis supported the second hypothesis. The mean scores of the intrinsic subscale were significantly higher in the group of NPs compared to the group of non-NPs. Like previous research examining job satisfaction of NPs, in the present study intrinsic work-related factors were associated with higher levels of overall job satisfaction (Bullough, 1974; Kacel, Miller, & Norris, 2005; Koelbel, Fuller, & Misener, 1991).

5.3.1.3 Extrinsic Work-Related Factors

The present analysis provides support for Herzberg's theory that extrinsic work-related factors have little effect on positive job attitudes and tend to lead to job dissatisfaction. Results indicated that RNs in the NP and non-NP groups were dissatisfied with extrinsic work-related factors. The mean scores on the extrinsic subscale did not differ significantly between the NP and non-NP groups. Up to this point, there has been no published research comparing samples of NPs and non-NPs in relation to intrinsic or extrinsic work-related factors of job satisfaction. Previous research on NP samples indicates that some NPs' level of job satisfaction was enhanced by meeting both intrinsic and extrinsic needs of employees (Beal, Stevens, & Quinn, 1997; Koelbel et al., 1991; Miller et al., 2005; Misener & Cox, 2001; Sidani, Irvine, & DiCenso, 2000). Some extrinsic work-related factors have been identified in the empirical literature on NP job

satisfaction as bringing about positive feelings and even enhancing job satisfaction. Extrinsic work-related factors that have been found to be positively associated with job satisfaction are as follows: (1) hours (Miller et al., 2005), (2) supervision (Miller et al.), (3) pay/benefits (Miller et al.), (4) having the time/resources (Miller et al.; Misener & Cox, 2001), (5) job security (Koelbel et al., 1991), (6) access to preceptors (Misener & Cox), and (7) interpersonal relationships (Sidani et al., 2000). Intrinsic work-related factors that have been found to be associated with feelings of negativity or dissatisfaction are: (1) recognition (Koelbel et al., 1991), (2) advancement (Koelbel et al., 1991), (3) reward distribution (Misener & Cox, 2001), and (4) involvement with research (Misener & Cox). Beal et al. (1997) found an association between interpersonal skills and feelings of satisfaction and dissatisfaction among neonatal nurse practitioners. While findings of a small number of previous studies suggest that certain extrinsic work-related factors are positively associated with job satisfaction and certain intrinsic work-related factors are associated with job dissatisfaction, it was more likely for NPs to experience higher levels of job satisfaction in relation to intrinsic work-related factors.

5.3.1.4 The Importance of Intrinsic versus Extrinsic Factors of Job Satisfaction

In a critique of Herzberg's Motivation-Hygiene theory, Sachau (2007) clarified the misinterpretation many make about Herzberg's view on the inability to motivate people with hygiene. Sachau (2007) argued that Herzberg never stated that administrators should avoid using hygiene (i.e. extrinsic factors) to "move" (or motivate) employees. Herzberg believed that if a job was boring and could not be made interesting, it would be reasonable to uses bribes, bonuses, and rewards to "move" (or motivate) employees to work. Herzberg cautioned the practice of using extrinsic factors to

motivate employees because it could be costly since hygiene needs escalate over time. In other words, employees would require more and more money, status, and perks to continue to be motivated. By contrast, intrinsic factors have more sustainability over time and should be identified and encourages.

A study conducted with a sample of 1,385 full-time employees varying in occupations found a strong relationship existed between work satisfaction and intrinsic reward (Mottaz, 1985). Participants in the study assigned a greater weight to intrinsic rewards than extrinsic rewards in their overall assessment of job satisfaction (Mottaz). Mottaz (1985) stated that increasing extrinsic rewards such as, higher wages, overtime pay, increasing holiday time, and implementing human relations training for supervisors were not likely to increase employees' level of job satisfaction. Mottaz (1985) suggested that employers should emphasize the richness of the job and the importance of intrinsic rewards by ensuring employees' work is meaningful, challenging, and interesting. Many other studies support the argument that employees who are considered at a higher level of the occupational hierarchy place a greater importance on intrinsic rewards (Ronan, 1970; Seeman, 1967; Simonds & Orifie, 1976). The findings of previous research suggest that the major determinants of work satisfaction have been identified as characteristics of the work itself and considered intrinsic in nature.

5.3.1.5 Theoretical Reasoning for Observed Differences: Herzberg's Motivation-Hygiene Theory

According to Herzberg's (1966) Motivation-Hygiene theory, six factors determine job satisfaction: achievement, recognition, the work itself, responsibility, advancements and possibility of growth. Herzberg proposed that "satisfiers" address situations in which

the work is carried out. In other words, "satisfiers" are intrinsic to the nature of the work. The subscales of the modified IWS (Stamps, 1997; Stewart et al., 2005) that were used to measure intrinsic work-related factors were autonomy and professional status. The autonomy subscale is similar to Herzberg's definition of responsibility and the work itself. The professional status subscale is similar to Herzberg's definition of achievement and recognition.

Findings of the present analysis support Herzberg's theory that intrinsic factors influence the level of job satisfaction. Registered nurses in the NP group reported a higher level of intrinsic job satisfaction than non-NPs. There are a number of explanations for the observed difference in the level of intrinsic job satisfaction between the NP and non-NP groups. First, the nature of the NP role allows RNs more independence and the freedom to exercise authority in situations involving the management of patient care compared to RNs in non-NP roles. This may explain the observed difference between the NP and non-NP groups in the perceived level of autonomy. Secondly, RNs in NP roles are expected to have a stronger clinical knowledge base than non-NPs and, historically speaking, NPs tend to practice in under-served areas where there are no physicians. The people in these communities would not have access to health care services if it were not for the NPs practicing in their communities. The combination of the NPs' knowledge base and the need for the NPs' services in under-served areas may have an impact on their level of self-esteem, which may in turn positively influence their perception of their professional status.

Herzberg's (1966) theory identified the major "dissatisfiers" as: company policy and administration, supervision, salary, interpersonal relationships, working conditions,

status, job security, and effects on personal life. Herzberg's theory suggests that "dissatisfiers" describe the employee's relationships within the context in which they work; hence, "dissatisfiers" are extrinsic to the nature of the work. The pay and organizational policies subscales were used to measure the extrinsic work-related factors. Again, the findings of the present analysis support Herzberg's (1966) Motivation-Hygiene Theory, which states that extrinsic factors bring about feelings of dissatisfaction. The fact that there was no significant difference in satisfaction with extrinsic work-related factors between groups and that both groups were somewhat dissatisfied (see Table 8) provides further support for Herzberg's theory. Although RNs in the NP group may have received higher pay than the RNs in the non-NP group, their degree of dissatisfaction was similar.

Another reason for the observed difference between the levels of dissatisfaction with extrinsic work-related factors is organizational policies. During the period of time that the data for the present study were being collected individual provinces and territories were responsible for the regulation of the NP role and little was being done at a national level to formalize the role of the NP (CIHI/CNA, 2005). It was not until 2006, when the CNA received funding from Health Canada to implement the Canadian Nurse Practitioner Initiative, that NPs in Canada had a unified voice (CNA, 2006). The scores on the extrinsic subscale may reflect the effects of the growing pains Canadian NPs were experiencing during this time.

5.4 Community Variables

5.4.1 Satisfaction with Home Community

The findings of the analysis indicate that RNs in the NP group were less satisfied with the community they resided in compared to the non-NPs. Almost half (46.8%) of the RNs in the NP group reported residing in the Territories (28.8%) or Ontario (18%); compared to the RNs in the non-NP group, a larger proportion of whom resided in the Atlantic provinces (34.6%) (see Table 5 and section 4.2.4). The proportion of RNs in the four western provinces was similar in the NP group (38.2%) and the non-NP group (39.6%). In the present study, RNs practicing in NP roles were more likely to live in remote, isolated communities in the Territories and Northern Ontario, which lack the amenities of more urban communities. This may account for the observed difference in the level of overall community satisfaction between NPs and non-NP groups.

5.4.2 Satisfaction with Work Community

Statistical testing revealed that RNs in the NP group were less satisfied with their work community compared to the RNs in the non-NP group; however, both groups' scores were on the positive side of the scale, which indicates that they were happy with their work community. Again, the size and location of the RN's community of work, may affect the level of the RN's satisfaction with the work community. Another reason RNs working in rural and remote locations may be less satisfied with the community in which they work is that they are constantly in the public eye. Many rural and remote nurses' clientele are also their friends and family members, and they are frequently asked for professional advice when they are not at work (Hegney, 1996).

5.5 Theoretical Reasoning for the Observed Similarities and Differences of Common Themes: Qualitative Findings

Five main themes were identified in the content analysis of the NPs' responses to the survey question addressing the importance of work-related attributes. The themes identified were similar to work-related attributes that have been described by Herzberg's (1966) Motivation-Hygiene Theory, the modified version of Stamp's IWS (Stamps 1997; Stewart et al., 2005), and Misener's Nurse Practitioner Job Satisfaction Scale (MNPJSS) (Misener & Cox 2001). However, differences were also identified between the findings of the qualitative analysis and the works of Herzberg, Stewart et al., and Misener and Cox. Reasons for the observed similarities and differences will be proposed.

5.5.1 The Nature of Advanced Nursing Practice in Rural and Remote Areas

The theme 'The Nature of Advanced Nursing Practice in Rural and Remote Areas' reflects the autonomy, work role, and variety of work that NPs are faced with when practicing in extended roles. Job satisfaction was identified as a sub-theme of 'The Nature of Advanced Nursing Practice in Rural and Remote Areas' during the analysis because the respondents' answers generally referred to the nature of rural and remote nursing. Herzberg (1966) did not identify autonomy as positively influencing job satisfaction, but Herzberg did identify the 'work itself' and 'responsibility' as work-related attributes that contributed to an increased level of job satisfaction. It can be argued that autonomy plays a role in the 'work itself' and the RNs' level of 'responsibility,' particularly in the NP role. The modified version of Stamp's IWS (Stewart et al., 2005) and the MNPJSS (Misener & Cox, 2001) contained 'Autonomy' subscales. The modified version of Stamp's IWS (Stewart et al.) excluded the subscale

addressing 'Task Requirements' because similar questions were included in the 'Job Content' scale found later on in the survey. Misener and Cox (2001) addressed the nature of the nursing practice in two items of the 44-item scale. These two items include the opportunity to develop and implement ideas (i.e., the work role) and variety of patient load (i.e., variety) (Misener & Cox, 2001). Given that the majority of NPs in the present study addressed the importance of the level of autonomy they had in their current position and the importance of their work role, it is suggested that theories and measurement tools pertaining to the job satisfaction of NPs use the themes and sub-themes identified from the content analysis of the present study. Since these themes have been developed from what is important to these RNs in NP roles, they could have an important role in the development of an instrument with more relevance to NP practice.

5.5.2 Work Life

The theme 'Work Life' emerged during the content analysis and incorporated the following factors: social/environmental factors, workload, administration factors, and personal factors. Herzberg (1966) included 'salary,' 'interpersonal relations,' 'company policy and administration,' 'status,' 'working conditions,' 'job security,' and 'personal factors' as components of dissatisfaction in his theory on motivation and job satisfaction, which are also components of one's work life. The modified version of Stamp's IWS (Stewart et al.) included attributes of work life, such as, 'organizational policies,' 'pay,' 'nurse-physician relationships,' and 'nurse-nurse relationships.' The MNPJSS (Misener & Cox, 2001) also integrates work life attributes in its measurement of NP job satisfaction. Work life attributes can be found in the 'intra-practice partnership/collegiality,' 'time,' and 'benefits' subscales. The 'intra-practice

partnership/collegiality' subscale addresses features of administration, organizational policy, respect, personal needs, conflict resolution, and compensation. The 'time' subscale includes items that pertain to workload and scheduling. Vacation/leave policies, benefits, and retirement packages are included under the 'benefit' subscale.

The theme 'Work Life' portrays the complexity of the work environment, which has not been captured by any one tool or theory. Herzberg's (1966) Motivation-Hygiene Theory, Stamp's modified version of the IWS (Stewart et al.,2005), and Misener's Nurse Practitioner Job Satisfaction Scale (Misener & Cox, 2001) touch on some aspects of the work environment, but fail to include some important factors that were identified by the group of NPs in the present study. Herzberg's theory does emphasize the importance of interpersonal relationships in the workplace, but his theory lacks emphasis on the importance that support, collaboration, communication, and collegiality play in the workforce, particularly in nursing. The MNPJSS includes items regarding benefits, compensation, and monetary bonuses, but fails to address salary. In the present analysis, findings of the qualitative analysis identified few RNs in the NP group reported pay, compensation, or retirement plans as important work-related attributes. A reason for differences may be that Canadian NPs have better benefit packages than their American counterparts.

Herzberg's definition of 'status' differs from that used in the present analysis, the modified version of the IWS, and the MNPJSS. Herzberg (1966) considered status to be associated with advancement or an employee's relative position or standing within a company. Herzberg (1966) coded participants' responses if they spoke of events such as being permitted to drive a company car or having an assistant. Herzberg's definition

indicates that status is extrinsic in nature. In the present analysis, and in the modified version of the IWS and the MNPJSS, status was defined as how employees perceive the value of their work or how their colleagues or the greater public view their work. This definition is based on the assumption that status is intrinsic in nature.

5.5.3 Personal and Professional Development

The theme 'Personal and Professional Development' addressed the importance RNs in NP roles place on acquiring new skills and perspectives in relation to their personal and professional lives. This theme also included the work-related attributes of 'recognition' and 'making a difference.' Herzberg (1966) recognized the importance of personal and professional development in his theory, but coded it as 'possibility of growth,' 'recognition,' and 'advancement.' Herzberg found that 'possibility of growth,' 'recognition,' and 'advancement' were intrinsic factors associated with job satisfaction. The modified IWS and the MNPJSS also included aspects of personal and professional development in their measurement of nurse job satisfaction. The modified IWS measured the nurses' perceptions of their professional status and level of pride they experienced in their work. Misener and Cox (2001) dedicated an entire subscale to personal and professional development in their 'professional growth' subscale. Concepts of personal and professional growth were also touched on in their 'intra-practice partnership/collegiality;' 'autonomy/challenge;' and 'professional, social, and community interactions' subscales.

5.5.4 Practice Philosophy

A main theme that emerged during the analysis of the open-ended survey question was the important role of 'Practice Philosophy' in the practice of RNs in the NP group,

specifically principles of primary health care, quality improvement, caring, and patient centered care. Herzberg's (1966) theory on motivation and job satisfaction and the modified version of the IWS do not include practice philosophy as an element related to job satisfaction. The MNPJSS includes one item in the 44-item scale, which addresses the nurse's ability to deliver quality care.

5.5.5 The Community

Findings of the content analysis of the survey question addressing the importance of work-related attributes revealed that 'The Community' was important to RNs in NP groups. 'The Community' theme appears to be unique to RNs practicing in rural and remote areas. Herzberg (1966) did not make reference to the community as a source of satisfaction or dissatisfaction, presumably because his theory is urban-based. The original and modified versions of the IWS do not account for the role the community may have in the level of nurse job satisfaction. The community variable was most likely omitted from Stamp's (1997) measures of job satisfaction because the IWS was used to study nurses working in urban-acute care settings.

5.6 Discussion of the Findings of the Qualitative Analysis

The findings of the qualitative analysis added richness to the quantitative data. The content analysis identified the salient work-related attributes of RNs practicing in NP roles in rural and remote areas in Canada. It is not surprising that theories such as Herzberg's (1966) theory of motivation and job satisfaction, and tools such as the modified version of the IWS and the MNPJSS exclude work-related attributes that were found in the present analysis. The purpose of the qualitative analysis was to identify the

essence of the NP role in rural and remote Canada from responses to the question: "What is the most important thing to you about your nursing practice?" (Appendix B, G16).

The qualitative analysis supports the use of Herzberg's (1966) theory in further analyses of NPs practicing in rural and remote settings. However, caution should be used as Herzberg's theory does not address the community as being a 'satisfier' or 'dissatisfier.' Herzberg's definition of status differs from more recent definitions of status that exists in the literature pertaining to job satisfaction of nurses (Misener & Cox, 2001; Stamps, 1997). The findings of the qualitative analysis suggest that refinement is needed for instruments such as, the modified version of the IWS and the MNPJSS in measuring the job satisfaction of NPs practicing in rural and remote areas. Based on the current analysis, it is recommended that the IWS be modified to reflect the importance of practice philosophy and the community. It is also recommended that the MNPJSS be tailored to include items pertaining to the nature of advanced nursing practice, practice philosophy, and the community. Items related to benefits maybe excluded, depending on the demographic profile of the sample. The detailed sub-themes may be useful in the development of items for scales that would be more relevant to this population of RNs.

5.7 Implications of the Research

5.7.1 Implications for Practice and Policy Development

The aging workforce coupled with the inability to recruit RNs fast enough to fill nursing vacancies presents a challenge for health care administrators and policy makers. It is unknown what effect the nursing shortage and high nurse turnover rate have had on the delivery of health care services in rural and remote areas in Canada, but it can be assumed that access to care has been adversely affected along with the quality of health

care. Earlier research suggests that the recruitment and retention of nurses has a direct impact on the level of job satisfaction of nurses (Hegney, McCarthy, Rogers-Clark, & Gormon, 2002). Job satisfaction of nurses is increasingly threatened as nurses are forced to work harder with few resources (Jackson, Mannix, & Daly, 2001). Previous studies have provided evidence that nurses practicing in rural and remote Canada have high level of job satisfaction on a number of work-related variables such as: (1) autonomy (Andrews et al., 2005; Penz, 2006); (2) professional status (Henderson, Betkus, & MacLeod; 2004); and (3) collaboration/interpersonal relationships (Henderson et al., 2004; Penz, 2006). Steps need to be taken to sustain a viable nursing workforce by translating the findings of Canadian studies to reflect current nursing practice and health care policies. Health care administrators must consider strategies to reduce sources of job dissatisfaction and enhance the sources of job satisfaction.

Health care administrators need to focus on retaining senior nurses by working with them to identify incentives to stay in their current positions. For example, if RNs indicate that they value autonomous decision-making, a manager may recommend that the RN pursue a career in advanced nursing practice. If a NP who is currently employed in a remote area values continuing education the manager should present the NP with opportunities for ongoing learning. It is time that health care administrators present RNs with opportunities to satisfy personal and professional development and that these opportunities are tailored to the RN's individual experience regardless of the point at which they are in their career, as a way to motivate nurses. Health care administrators need to develop incentives that are specific to the nurses who are currently employed so that senior nurses remain in the workforce until they are eligible to retire. For example,

in the present study it was found that RNs practicing in NP roles value the importance of the nature of advanced nursing practice in rural and remote areas, particularly, the level of skill and knowledge that is required of them in their position. A health care administrator may ensure that the RNs in NP roles have access to resources that will help them hone their skills and expertise, such as access to preceptors or a network of colleagues who provide consultation and professional support, through venues such as telehealth or face-to-face contact.

The aging workforce and high nurse turnover rate has also led health care administrators to focus on the issue of recruitment of new nurses to rural and remote health care facilities (Cowin, 2002; Hegney, 1996; Lea & Cruikshank, 2005). The nursing curricula need to continue to incorporate rural and remote practicum opportunities. Tuition reimbursement should be granted to new nursing graduates as an incentive to work in rural and remote areas. In addition, post-graduate work in the area of rural and remote nursing practice should be offered to nurses pursuing graduate degrees in nursing as a strategy to recruit new nurses to the area.

National recognition of rural and remote nursing as a specialty may help to attract new nursing graduates and senior nurses to non-urban settings. If rural nursing is viewed as a specialty with its own unique concepts and theories surrounding health care delivery nurses may be more inclined to practice in rural and remote settings. In 2002, the Canadian Association of Rural and Remote Nurses (CARRN) was formed by a group of nurses practicing in rural and remote areas who developed a national interest group to promote rural and remote nursing as a unique specialty. The CARRN must continue to connect with the nurses practicing in rural and remote areas as a way to retain nurses

already practicing in rural and remote areas, and must continue to work in partnership with the CNA and health care administrators to recruit new nurses to rural and remote areas.

There is a desperate need to develop rural and remote education standards to better prepare nurses for their roles in both NP and non-NP roles. Initiative must be taken to improve access to continuing education opportunities for nurses practicing in rural and remote areas. Educational opportunities focused on rural and remote nursing will help nurses develop the confidence and expertise that is necessary while practicing in a rural or remote area. Health care administrators should allot more time for rural and remote nurses to focus on research and implementing best practice standards. Job satisfaction may be enhanced by recognizing rural and remote nursing as a specialty and by developing the educational standards for rural and remote nursing, as these factors will influence rural and remote nurses' perceptions of their professional status.

Since the RNs practicing in NP and non-NP roles included in the present study were dissatisfied with the extrinsic work-related attributes of their jobs, pay scales and organizational policies should be addressed to alleviate job dissatisfaction. First of all, pay scales and remuneration should be revisited. The RNs' pay in both NP and non-NP groups should be re-evaluated on the basis of the cost of living in the area where RNs work and should provide an incentive for working in isolation. Health care administrators should value the skills and expertise of RNs practicing in rural and remote settings and reward them accordingly. Registered nurses, particularly those in NP roles, offer much more to the health care system than a cost-effective way to deliver health care services to underserved areas. Secondly, organizational policies need to be made at a

grass-roots level. Registered nurses need to be consulted on decisions being made by administration.

The findings of the present study stress the importance of viewing intrinsic and extrinsic work-related variables associated with job satisfaction and dissatisfaction in conjunction with the overall level of job satisfaction. By examining only the overall level of job satisfaction health care administrators may fail to notice the role that intrinsic and extrinsic work-related factors play in the level of job satisfaction or dissatisfaction. Although overall job satisfaction is important, intrinsic and extrinsic work-related attributes must be enhanced. Intrinsic work-related attributes will facilitate the motivation of nurses, whereas extrinsic work-related attributes will meet the basic needs of nurses so they can continue to practice in their role.

Findings of the present study indicate that NPs and non-NPs are satisfied with both their home and work communities. The home community scale focused on the amenities of the community whereas the work community item focused on being 'happy' with the community in which the RNs worked. Further research is necessary to identify whether community satisfaction variables affect the level of job satisfaction of nurses. Even though NPs and non-NPs reported being satisfied with their home and work communities, health care administrators must acknowledge community satisfaction as a potential barrier to the recruitment and retention of nurses in rural and remote areas. Health care administrators need to provide incentives to attract RNs to work in areas that lack the amenities of urban centres, such as granting time off and providing financial incentives to work in these areas.

Conclusions based on the finding of studies that focused on nurses practicing in urban settings may not be easily transferred to RNs practicing in NP and non-NP roles in rural and remote areas in Canada. Variables such as the nature of advanced nursing practice, work life, personal and professional development, practice philosophy, and the community may differ significantly between urban and rural and remote nurses. It is important for health care administrators and policy makers to be aware of the individual, work environment, and community variables that contribute to the level of job satisfaction and dissatisfaction of nurses.

5.8 Strengths and Limitations of the Study

Because the original survey was not designed specifically to focus on the nursing practice and work life of RNs in NP roles, the available data were limited. Steps were taken to create research questions that fit the existing data. The questionnaire did incorporate a few questions that were related to nurses in ANP roles. In the present study, the limited quantitative data that were available on RNs practicing in NP roles were supplemented by analyzing responses to the open-ended question, "What is the most important thing to you about your nursing position?" The qualitative analysis allowed the researcher to explore issues that were most central to nurses practicing in NP roles, which might not have been captured by the revised IWS survey questionnaire. Since the present study focused on similarities and differences between RNs practicing in NP versus non-NP roles it was not appropriate to use a tool, such as the MNPJSS which was designed for NPs only. In the future, researchers should consider using a tool that is specific to measurement of job satisfaction of NPs as findings would most likely produce more precise and sensitive data in terms of the NPs' work environment and role.

The Nature of Nursing Practice in Rural and Remote Canada was the first study to describe the demographic characteristics, work settings, and satisfaction with work life and community of nurses practicing in rural and remote settings in Canada (MacLeod et al., 2004). Through the process of test- retest reliability testing the embedded scales were found to be of good quality (Stewart et al.). A detailed process was undertaken to ensure that the content of the survey questionnaire items were relevant to nurses practicing in rural and remote Canada (Stewart et al.). The response rate was relatively high (68%) for a mailed survey (Stewart et al.). The sample of participants in the study represented all RNs in all of the provinces and territories in Canada (Stewart et al.). Hence, the findings of the original study are easily generalized to all nurses practicing in rural and remote settings in Canada (Stewart et al.).

5.9 Suggestions for Further Research

The present study highlights the need for further research regarding the nature of advanced nursing practice in rural and remote areas in Canada. Further research is necessary to determine if RNs in NP roles are practicing within their full scope of practice as delineated in the CNPI's (2006) *The Time is Now*. Data collected would provide insight into the process taken to integrate the NP role into Canada's health care system and serve as a tool to evaluate the progress that has been made since the launching of the CNPI in 2006. Findings of a study like this would provide governments, regulatory organizations, employers, unions, and professional organizations with necessary information on NPs' ability to practice to full scope focusing on: (1) role clarity, (2) autonomy, (3) support and collaboration, and (4) perceived level of confidence in functioning in an independent role.

Research needs to continue in the area of nurses practicing in rural and remote settings. In addition, job satisfaction and specific tools need to be developed that reflect the nature of rural and remote nursing in both NP and non-NP roles. Further, research is necessary into how intrinsic and extrinsic work-related attributes influence the perceived level of job satisfaction of rural and remote nurses. What factors do rural and remote nurses identify as enhancing job satisfaction? Are the factors that are identified as enhancing job satisfaction of rural and remote nurses intrinsic or extrinsic in nature? Do the factors identified as enhancing job satisfaction differ between NPs and non-NPs?

As advanced nursing practice and the NP role become more prevalent in Canada, research must be conducted at a national level. Aspects of retention must be examined, such as the factors that are associated with NPs staying and leaving their current positions. Further study is needed to examine: (1) the nature of advanced nursing practicing in rural and remote areas, (2) quality of work life, (3) opportunity for personal and professional development, (4) practice philosophy, and (5) the importance of the community, as potential factors associated with job satisfaction of rural and remote NPs. More specifically, what are the ages of the NPs leaving? Are they finding new jobs or are they opting for early retirement? Research conducted in this area would contribute to existing knowledge on factors that influence nurse turnover, specifically, the viability of the NP workforce in rural and remote areas.

5.10 Conclusion

The results of the present study add to the limited knowledge on the nature of rural and remote nursing in Canada, and specifically on the NP role. The purpose of the present study was to describe similarities and differences between RNs whose practice

roles were categorized as NP versus non-NP in rural and remote Canada in relation to job satisfaction and individual, work environment, and community variables. The results of this non-equivalent comparison group design study indicate that Herzberg's (1966) Motivation-Hygiene Theory is applicable to RNs practicing in NP roles in rural and remote settings in Canada. Results from the analysis supported the hypothesis that RNs practicing in NP roles would report a higher level of job satisfaction than their non-NP counterparts. As predicted, further statistical testing indicated that RNs practicing in NP roles reported higher levels of intrinsic job satisfaction (autonomy + professional status) compared to RNs practicing in non-NP roles. Both NP and non-NP groups were dissatisfied with extrinsic work-related attributes although statistical testing did not reveal significant findings. Content analysis of an open-ended survey question addressing the importance of work-related attributes specific to RNs practicing in NP roles revealed five central themes: The Nature of Advanced Nursing Practice in Rural and Remote Canada, Work Life, Professional and Personal Development, Practice Philosophy, and The Community. Even though Herzberg's (1966) theory proposes that intrinsic factors function primarily to promote job satisfaction and extrinsic factors function primarily to prevent job dissatisfaction, the findings of the present study suggest the need to fulfill both intrinsic and extrinsic work-related attributes as strategies to recruit and retain RNs in rural and remote areas of Canada.

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Appendix A: Tables from the Literature Review

Table 1 - Job satisfaction among nurse practitioners

Source	Purpose of the study	Design, Sample & Setting	Instrument & Variables
• Miller, K., Apold, S., Baas, L., Berner, B., & Levine-Brill, E. (2005)	• Not stated.	• Descriptive design using frequency analysis • Convenience sample of 207 • Participants approached by investigator or staff member at 2 separate national NP conferences. Participants represented 38 states in the USA and the Virgin Islands.	• Independent survey based on works by Herzberg and Misener and Cox • 58-item survey (51 Likert and 7 demographic) • Likert portion was divided into 3 sections (job factors-16, clinical practice factors 16 and personal factors 19) • Job factors and clinical practice are equivalent to Herzberg's extrinsic factors. Personal factors represent intrinsic factors. Both served as independent variables. Overall job satisfaction was the dependent variable.
Findings		**Implications**	
• Demographic characteristics • *n* = 196 female (95.1 %) *n* = 10 male (4.9%) • Average number of years since graduation was 8. • Average number of years worked 7.46 Average numbers of years holding certification in APN 7.03.		• Findings of factors that enhance job satisfaction were not surprising in the clinical practice were reflective of the population of family NP (see patients along the continuum of newborn to geriatrics). Findings within this category reflect NP's desire to function as a team. • Findings within the personal factors show	

• Subspecialties included FNP (Family), ACNP, PNP, GNP, WHNP (Women's Health), Dual, Other (adult, psychiatric, neurological, ID, school or occupational health). Largest group was FNP- 106 which was followed by "Other" with 42. • **Job factors** that enhanced job satisfaction were Monday-Friday work hours (*n*=133), immediate supervisor (*n*=110), vacation time (*n*=105), sick leave policies (*n*=101), paid educational leave (*n*=95). • **Clinical practice factors** that enhanced job satisfaction were variety of patients seen with differing diagnoses (*n*=137), patients varying in ages (*n*=122), onsite consultation with other health care providers (*n*=116), time allotted for patient visits (*n*=112), and exam room availability (*n*=109) • **Personal factors** that enhanced job satisfaction were the quality of care (*n*=181), respect from patients for care that is provided (*n*=178), respect from peers (*n*=152), respect for your expertise (*n*=134), and opportunities to be involved with local NP organizations (*n*=130). • **Overall** the majority of this population was extremely satisfied- somewhat satisfied with their jobs (*n*=176). Only *n*=28 of respondents were somewhat to very dissatisfied with their jobs and *n*=3 did not respond to this question.	that the quality of care NP's provide and the respect they receive were rated the highest satisfiers. • The findings of the overall level of job satisfaction of this study were not congruent with other studies. However, the findings of this study are congruent with the other studies that found intrinsic factors lead to higher job satisfaction when compared to extrinsic factors. • The environment in which NPs work affects the level of job satisfaction they experience. By reviewing these findings administrators can identify the factors that were identified as low satisfiers and work to change those factors to enhance recruitment and retention of NPs.
Comments	
• Purpose was not stated and ethics not addressed. • Standard deviations were not reported when means were used to describe the sample. • Did not state the percentage of nurses that were master's prepared. • Instrument reviewed for face and content validity by 4 practicing NPs. • 7 minutes to fill out and those who completed the survey were put into a draw to receive a 1-year membership in the professional organization. • Final question asked to rank order the top five factors that were most important to job satisfaction.	

Table 2 - Measurement of nurse practitioners' job satisfaction in a Midwestern state

Source	Purpose of the study	Design, Sample, & Setting	Instrument & Variables
• Kacel, B., Miller, M., & Norris, D. (2005)	• To describe the current level of job satisfaction of nurse practitioners (NPs) in one Midwestern state.	• Descriptive correlation design and cross sectional survey methodology • Randomized sample of 147 certified NPs (63% response rate) • A Midwestern state in USA • Descriptive statistics and correlations were used to analyze the data.	• Misener Nurse Practitioner Job Satisfaction Scale (MNPJSS) • 44-item with 6-point Likert scale with responses ranging from very satisfied to very dissatisfied. • Dependent variable- total scores from MNPJSS • Independent variable- overall job satisfaction score, practice setting, and years practiced as a NP.
Findings		**Implications**	
• The majority of the sample was female, master's educated, practiced in an urban or suburban setting, having 12-15 years experience, working 30 - 40+ hours a week, worked at one practice setting, and earned $40,000- $79,999 a year. The number of NPs with contracts was split evenly. • Overall the majority of this sample (72%) was minimally satisfied with their jobs. • The factors receiving the highest level of satisfaction were all intrinsic factors and included: sense of accomplishment; challenge in work; level of autonomy; patient mix; and the ability to deliver quality care. • Factors receiving the lowest level of satisfaction were extrinsic factors and included: time off to serve on professional committees; reward distribution; amount of involvement in research; opportunity to		• NPs experience highest level of job satisfaction with intrinsic factors • Lowest satisfaction was experienced with extrinsic factors. • In this study new NPs were most satisfied with all aspects of their jobs. However, this could be influenced by the new NPs increase in salary, obtaining a position after years of studying, and applying the information they learned into practice. • This study found that after one year of practicing the level of satisfaction in all six factors fell. Levels continued to fall each year of working, reaching a plateau after the 8th and 11th year worked. This may be due to a ceiling of advancement and no further increase in salary. • Employers must look at extrinsic factors so that the role of the NPs continues grow and current NPs do not leave their positions.	

receive compensation for services outside normal duties; and monetary bonuses available in addition to salary. • Intra-practice partnership; challenge/ autonomy; professional, social, and community interaction; professional growth; time and benefits were six factors that correlated with total job satisfaction (Cronbach's alpha ranged .77-.94). • NPs in extended care facilities were most satisfied with all factors except benefits. NPs in hospital ambulatory care were the least satisfied with intra-practice partnership; challenge/autonomy; and time. NPs that worked in community/public health were least satisfied with professional, social, and community interaction. NPs who worked in mental health were least satisfied with professional growth and most satisfied with time. NPs employed in urban settings scored highest overall in all six factors and those employed in rural settings scored lowest. • NPs with 0-1 year experience scored highest in intra-practice partnership; challenge/autonomy (intrinsic); professional growth; and benefits (intrinsic). This group also scored higher than more experienced nurses in professional, social, and community interaction and time (both extrinsic factors)	• The NP's position should allow for more of their time to be allotted to research and professional activities.
Comments	
• Many references were well known experts in area of job satisfaction.	

Table 3 - Job satisfaction of nurse practitioners: An analysis using Herzberg's Theory

Source	Purpose of the study	Design, Sample, & Setting	Instrument & Variables
• Koelbel, P., Fuller, S., & Misener, T. (1991)	• To test Herzberg's theory that intrinsic factors are sources of job satisfaction, while extrinsic factors are sources of job dissatisfaction.	• Descriptive correlational conducted 1987-1988 • *n*=132 • NPs in South Carolina • Factor analysis	• 60-item questionnaire • Index of Job Satisfaction (IJS), Minnesota Satisfaction Questionnaire-Short Form (MSQ-SF), and sociodemographic questionnaire • Dependent variable- job satisfaction • Independent variables- 20 MSQ items for extrinsic and intrinsic factors
Findings		**Implications**	
• 98% of the participants were female. Majority were Caucasian. Over half were married and 42% had one or two children. Ages ranged for 26-63 years. Most NPs graduated from certificate programs with 28% being master's degree prepared. Approximately three-quarters of the population had national certificated in their specialty. Forty-four percent worked in primary care settings. Other specialties included pediatrics, surgery, geriatrics, neonatal, and midwifery. NPs stated to be doing few administrative duties. Eighty percent were working within an institutional setting and half of the population worked in urban settings. Salary ranges were most frequently between $25,000-29,999. Work experience ranged from .92-30 years. • Overall the NPs found to have a moderate overall level of job satisfaction. • General job satisfaction revealed that 50%		• Health care administrators should consider strategies to eliminate the source of dissatisfaction especially in the area of compensation, company policies and practices, and supervision. They must address issues that pertain to the work environment of nurses functioning in advance practice roles.	

of NPs were moderate satisfaction and 39.4% were highly satisfied. • Scores indicated a high level of satisfaction with intrinsic factors of the advanced practice role in 66% of NPs and moderate satisfaction in 29.5% of the population. NPs reported the highest level of satisfaction when they helped others. They also felt a high level of satisfaction when they used their abilities, had steady employment, varied their work, and practiced without compromising their values. • The average score of extrinsic factors revealed that NPs were slightly above the neutral point. NPs were least satisfied with compensation, advancement, company policy and practices, recognition, and supervision/human relations. • The findings support Herzberg's theory that intrinsic factors are sources of job satisfaction, while extrinsic factors are sources of job dissatisfaction. The only exceptions were that recognition and advancement (intrinsic factors) contributed to dissatisfaction and security (extrinsic factor) was found to be the fourth most satisfying influence within this sample.	
Comments	
• The survey required 20 minutes to complete. • The inclusion criteria were included in the article. • Older study with many dated references. • Supports the use of the MSQ-SF as a valid tool of Herzberg's dual-factor theory.	

Table 4 - Expectation vs. realization in the nurse practitioner role

Source	Purpose of the study	Design, Sample, & Setting	Instrument & Variables
• Linn, L. (1975)	• To describe the expectations of the first class of the Primex students in UCLA and the job evaluations they made during the course of their educational program and preceptorship. • An evaluation of the students jobs- before, during, and after their training and preceptorship.	• Longitudinal- descriptive study and program evaluation • 11 students that were registered nurses employed in ambulatory care providing primary care • USA • Used means for statistical analysis	• Four- and- a- half month Primex program that was followed by 18- months of preceptorship. • Data were collected on the first day of class, six months and 12 months after the program ended. • Independent questionnaire
Findings		**Implications**	
• There was an increase in the nurse's performance of activities that were traditionally carried out by the doctor. • There was a decrease in the nurse's performance of traditional activities (i.e., put labels on specimen bottles) except in the area of counseling or assessment of family, work, school, or home environment. • Activities that were traditionally shared among doctors and nurses continued to be performed in the student role. • Gathering data, teaching, and counseling were most frequently performed in the student role. • Students indicted that their work was more interesting, varied, and creative. They were required to be more independence and greater skills and responsibility. This made the students feel less secure and caused them more stress. The students' perception of the importance of their job remained high in both roles. Salary did not change much between roles or over time. It was found		• NP found their new roles more stressful and less secure than their old roles. • Salaries had not increased much or their opportunity for advancement. • Data from this study suggests that NPs did not feel support, accepted, and well supervised in their new role by doctors. After a year participants felt that issues had resolved, but their need for support continued.	

that the opportunity for promotion did increase slightly, but it still remained low. Six and twelve months later participants found that either their salary or opportunity for promotion had increased to their level of expectations. • The greatest source of stress in the new and old roles was their personal expectation to perform well. Working relationships with doctors became an increasing source of stress after six months, but within a year participants stated doctors was no longer the case. Heavy workloads and patient demands continued to be a source of stress. Working relationships with other nurses became a less significant source of stress and within one year this was the least important source of stress. It was also found that after six months the new role was more stressful than the old role and after a year the stress level returned to the same level as the old role. However, after one year personal expectations of good performance and their personal lives continued to be a significant source of stress. • The overall level of job satisfaction increased from 4.1-5.0 (six being extremely satisfied) at the end of six and twelve months respectively.	
Comments	
• One of the first studies done in the area of job satisfaction among NPs. • Did not specify if the sample was a group of master's prepared students or diploma prepared students.	

Table 5 - Development of the Misener Nurse Practitioner Job Satisfaction Scale

Source	Purpose of the study	Design, Sample, & Setting	Instrument & Variables
• Misener, T.R., & Cox, D.L. (2001)	• To develop a reliable and valid tool to measure job satisfaction among nurse practitioners.	• A cross-sectional design • Population was 1,117 of NPs recognized by the state boards of nursing from two southern states • *n*=342 NPs • USA • Exploratory factor analysis using squared multiple correlations was used to analyze the data	• The Misener Nurse Practitioner Job Satisfaction Scale (MNPJSS) • 77- item self-administered pencil and paper survey
Findings		**Implications**	
• The mean age was 43.6 (SD= 8.0) • 98% female and 93% described themselves as Caucasian. • The subscales that emerged included: intra-practice partnership/collegiality; challenge/autonomy; professional, social, and community interaction; professional growth; time; and benefits • Mean score found that NPs were "minimally satisfied" (M= 193, SD=33, range: 59-260). • The highest rating on job satisfaction included: percentage of time spent in direct patient care, challenge in work, sense of accomplishment, ability to deliver quality care, and access to preceptors. • The items that received the lowest level of satisfaction included: momentary bonuses in addition to one's salary, opportunity to receive compensation for services performed outside normal duties, reward distribution, involvement in research, and process used in conflict resolution.		• Many of the instruments that have been developed to measure job satisfaction do not reflect primary care. The MNPJSS was developed specifically for NPs. • Two subscales that emerged in the MNPJSS and that differ from Mueller and McCloskey's (1990) work were "time" (i.e., time to review lab values, time to return telephone calls, time allotted to see patients) and "professional growth" (i.e., professional committee service and research). • The MNPJSS is a reliable and valid tool that can be used in future research and for employers that are wanting to recruit and retain primary care NPs.	

Comments
• Inclusion criteria were stated within the publication. • Consent was obtained from the university and the participants. • Developed based on Herzberg's theory and Mueller and McCloskey's instrument. • Like previous research, this study found that factors are most correlated with job satisfaction are intrinsic in nature. Extrinsic factors were reflected high levels of dissatisfaction.

Table 6 - Team midwifery: The views and job satisfaction of midwives

Source	Purpose of the study	Design, Sample, & Setting	Instrument & Variables
• Todd, C.J., Farquhar M.C; & Camilleri-Ferrante, C. (1998)	• To assess the satisfaction of community and hospital midwives and their views about working practices and care provided as part of an evaluation of team midwifery approach.	• Descriptive • Community and district hospitals in the UK • *n*=80 • Midwives providing antenatal, intrapartum, and postnatal care.	• Glasglow Midwifery Process Questionnaire • Demographic variables, job satisfaction, quality of care variables, and relationships with professionals and women
Findings		**Implications**	
• Community midwives were younger, more likely to have further midwifery training, employed on lower grades, less likely to be married, and less likely to have children when compared to hospital midwives. • Community nurses were more likely to have further educational training: Registered General Nurse (98%), Midwifery (100%), degree (6%), had an Advanced Midwifery Diploma (10%), or 'other' (40%). Hospital nurses were less likely to have further educational training: Registered General Nurse (93%), Midwifery (93), Degree (0%), Advanced Midwifery Diploma (3%), or 'other' (20%). • There were no differences in the level job satisfaction, their sense of achievement, their perceived level of responsibility, and their desire to increase or decrease their level of responsibility reported by the two groups. • Hospital midwives were found to have low morale. Community midwives found their jobs to offer a variety of work, enabled them to use their skills and knowledge to full scope, and offered opportunities for professional		• Reduction of caseload, reducing team size, ensuring adequate staffing, reducing 'on-call' and reducing labour ward hours may help in improve the team midwifery approach.	

development. Hospital midwives reported having to follow strict policies and guidelines. • Community midwives found the long hours they worked and being on call disruptive to their family and social lives. 41% of hospital midwives reported regularly working beyond their shifts compared to 28% of community midwives. • 44% of community and hospital midwives found team midwifery was detrimental to the quality and continuity of care delivered. • 98% of midwives in this study thought team midwifery was good in theory, but not in practice.	
Comments	
• 87% response rate. • This study addressed job satisfaction in terms of team midwifery approach to delivering care.	

Table 7 - The rural nurse practitioner: A challenge and a response

Source	Purpose of the study	Design, Sample, & Setting	Instrument and Variables
• Sullivan, J.A., Dachelet, C.Z., Sultz, H.A., & Henry, M. (1978)	• The purpose the study was to describe: the characteristics of the rural nurse practitioners, characteristics, of their practice, availability and motivation of NPs for rural practice, employment conditions of the NP, and the satisfaction of NPs and employers with the NP role.	• Secondary analysis of a national longitudinal cohort study of over 1000 NPs conducted by Sultz et al. (1976) • 525 employed NPs who graduated between May 1975 and June 1976 who answered the question on location of practice.	• The instrument used to conduct the analysis was not mentioned in the article. • Study variables included: demographic data, practice characteristics, and factors associated with motivations and job satisfaction.
Findings		**Implications**	
• 16% (85) of the nurses surveyed reported practicing in rural settings and 84% (440) reported their practice location as inner city, other urban, suburban, military, industrial, college, hospital, or Indian reservations. • Demographic characteristic did not appear too differ between those practicing in rural and urban settings. • The modal age range was 25-34 in both groups which comprised 50% of the NPs. 97% were female and over 97% were Caucasian. 52% of rural NPs were unmarried compared to 44% urban NPs. • 91% of rural NPs obtained certificates rather than a master's degree for their NP preparation. 76% of urban NPs attended certificate programs. • 47% of rural NPs had earned a baccalaureate or master's degree prior to NP training. • The average number of years nurses practiced before obtaining their NP was		• Findings reflect that NPs in rural settings are providing much of the direct services to clients that are offered in their practice setting. Collaboration with physicians is sought when necessary. • Findings suggest the increased need of NPs in rural settings when looking at the distribution of the population. • The flexibility and creativity allowed in rural practice setting may draw NPs to the rural areas. • These findings influenced the passing of the Rural Health Bill. • In only one year 85% of NPs who graduated reported entering primary care practice in rural areas which is reflective of the number of new employees who could be recruited in a short period of time.	

less than 10 years. • Family NP was most frequently chosen as a specialty, followed by pediatric and adult specialties. • Of the 85 rural nurses in the sample 99% were providing a wide range of primary care services to clients of all ages. • Approximately 80% of the practices reported having a physician periodically available on site, by telephone in 97% of the practices, and in 60% of the practices provided additional consultation. • Regardless of the rural nurse's specialty, 92% NPs conducted health assessments of clients, 93% provided care for physical illnesses; 81% provided care for mental and emotional health problems; 82% provided family planning assistance; 79% provided maternity care; and 81% provided emergent care. • Rural NPs (79%) saw on average, between 6 and 15 patients a day. • The motivator for NPs to work in a rural setting was the creative approach to health care delivery and the autonomy of their role. The location of employment was only reported by 10% of rural NPs and 9% of non-rural NPs as the most important reason for selecting a practice setting. The fourth highest reason was training and education opportunity. • Over 95% of the NPs and employers of NPs in this study were satisfied with the NP role. 74% of rural NPs stated that they were very satisfied and an additional 20% stated they were somewhat satisfied with their present position. These percentages were slightly higher for non-rural NPs. • Employers in rural settings reported the most important reason for hiring NPs was to increase services to more people and enhance quality of care. • Over two-thirds of the rural NPs, when compared to 60% of non-rural NPs, spent 100% of their time functioning in their new expanded role.	

• 25% of the American population lives in rural areas and only 16% of this cohort of NPs entered rural practice. • 71% of NPs reported working in a community based health center or clinic. • The average annual salary of rural NPs was $12, 200 compared to $13, 400 for non-rural NPs.	
Comments	
• American focus • Unable to locate publication from the original study (Sultz et al., 1976). Do not know the area of the USA the study was conducted or the year the data were gathered. • One of the first and only studies addressing job satisfaction of rural NPs.	

Table 8 - Implementation of the primary care nurses practitioner role in Ontario

Source	Purpose of the study	Design, Sample & Setting	Instrument & Variables
• Sidani, S., Irvine, D., & DiCenso, D. (2000)	• The purpose the study was to examine the implementation of the NP role in primary care settings, more specifically the NPs' professional characteristics, employment setting, scope of practice, practice pattern, and satisfaction with their role.	• Descriptive study • 166 participants certified by the College of Nurses of Ontario as Extended Class. • *n*=123 PCNPs • Descriptive statistics were used to measure central tendency and frequency counts.	• Questionnaire was developed by the research team • Content was validated for clarity, comprehensive-ness, and relevance by five NPs working in educational and clinical settings.
Findings		**Implications**	
• 74.1% (123) of respondents were currently working as NPs in primary health care settings, 18.7 % worked as staff nurses, 1.8% worked as NPs in acute care setting, 3.6% were not working as staff nurses or NPs, and 1.8% did not reply to the question. • Majority of the respondents were married women with a mean age of 41.3 years. 60% of these nurses were diploma prepared and 60% had taken post-training, which for most people consisted of a baccalaureate degree. The average number of years the respondents had been nursing was 18.8 years and practicing in the PCNP role for 3.7 years. • Majority (79.7%) of the PCNPs worked in one setting. Approximately 50% of the respondents worked in community centres; 10% worked in a fee-for-service family physician office, health service organizations, and out post settings/nursing stations; and 40% worked in 'other' types of agencies, which included educational institutions and		• The PCNPs in this study were able to implement their role functions as delineated by the Ontario Expanded Nursing Services for Patients Act. • The feeling of isolation and lack of available resources might be part of the reason why NPs have not decided to work in nursing stations in remote areas. • To ensure satisfaction and retention of PCNPs it is important to monitor and address sources of dissatisfaction.	

aboriginal health services. • Almost all agencies offered services in English (98%), 30% in French, and 42% in other languages. Wellness care, care of minor acute illness, and monitoring of chronic illnesses were offered in almost all agencies. Over 60% offered care of major acute illnesses and palliative care. An additional 25% offered 'other' services for specific populations such as the homeless, aboriginal people, pregnant women, and those with psychosocial problems. The agencies in this study also employed physicians, nurses, and other health care providers (i.e., social workers, dieticians, chiropodists, mental health workers, health educators, and dentists). 36.6% of the agencies 'always' provide on site physician back-up for the NPs. • Majority of PCNPs perceived their role as formalized. 70% reported practicing in an advanced practice role, their scope of practice was clearly defined, and their responsibilities and functions were outlined in an official document. Over half of PCNPs stated that their role definition was decided upon by nursing and medical directors and guidelines were available to assist in dealing with medical situations. One-quarter of the respondents indicated that a manual describing the procedures related to the services they provided was available. • The PCNPs in this study perceived that their role required them to have had a high level of independence. Only 10% of respondents reported that they admitted patients to the hospital. Almost all PCNPs reported making medical diagnoses, ordering laboratory and diagnostic testing, and prescribing medications. • Clients were most commonly self-referrals, referred by a colleague within the same agency, triage or referrals from other agencies. Less than half of the PCNPs used standard orders or protocols	

when planning and providing care to clients. • 17% of PCNPs were expected to be on-call and approximately two-thirds made home visits. • Approximately 70% of PCNPs stated that they were able to deliver care as they would like. Lack of time, lack of interpreter services, and the desire to offer holistic and preventative services were reasons PCNPs felt they were not able to deliver the care as they would like. The respondents felt valued by their colleagues and reported they felt they were implementing a role for which they were trained. • The PCNPs in this study were satisfied with their job and the work they did. The five most positive aspects of their job were: autonomy, independence, NP- client relationship, collaboration, and being part of a multi-disciplinary team. The five most negative aspects of their NP role were: inadequate remuneration, heavy workload, lack of public awareness of the NP role, lack of acceptance, and isolation from colleagues.	
Comments	
• Response rate was 73.1%. • The survey was designed to collect information that reflected the role definition of the PCNPs in Ontario as set out by the CNO and Ontario Ministry of Health. • The survey was based on self-report	

Table 9 - Neonatal nurse practitioner role satisfaction

Source	Purpose of the study	Design, Sample & Setting	Instrument & Variables
• Beal, J., Steven, K., & Quinn, M. (1997)	• To explore the role satisfaction of a nationwide random sample of neonatal nurse practitioners (NNPs).	• Descriptive study using a mixed method approach • *n*=315 NNPs working in NICU • USA	• Advanced Practice Job Satisfaction Survey (7-point bipolar Likert type scale) • Open ended questions • Demographic data • *t*-tests and content analysis were used to analyze the data
Findings		**Implications**	
• The average age of respondants was 38.9. The majority of the NNPs worked fulltime in the NICU, were experienced, were not master's prepared, and considered themselves at Benner's stage of advanced or intermediate role development. • The NNPs were highly satisfied with their role. • No statistically significant differences were found in role satisfaction when compared to practice philosophy, age, geographical location, level of experience, presence or absence of a mentor, nurse practitioner preceptor, or education. • The NNPs who were paid by, reported to, and evaluated by departments of medicine were more satisfied than those paid by, reported to, and evaluated by nursing departments. • Other factors that significantly influenced role satisfaction were patient care, kinds of patients, sense of accomplishment, and the challenge of learning. • With the use of a visual analogue scale the study revealed that NNPs tended to view their role more as a medical philosophy versus a nursing philosophy. Master's prepared nurses viewed their practice		• To enhance the NNPs role there needs to be more support from administrators. • NNPs must come to a decision on what their role is so that they gain the respect and recognition they deserve from colleagues and families. • A model for advanced practice nursing in the NICU is needed to further support and enhance the NNP's role.	

philosophy as having a more nursing focus when compared with NNPs with diplomas, associate degrees, or bachelor's degrees. Nurses who reported to, were paid by, and evaluated by nursing departments were more likely to have nursing than medical practice philosophies. NNPs that saw themselves as advanced according to Benner's theory had a weaker nursing practice philosophy. NNPs with a strong nursing philosophy believed that time spent in educational activities and research was important in influencing their role satisfaction. Those NNPs with a more medical philosophy perceived that time spent with a patient and the kinds of patients seen influenced their role satisfaction. • The most satisfying aspects of the NNPs role were: autonomy, relationships, patient care management, role issues, and outcomes. Autonomy or independence was identified by all NNPs as being important. Although everyone identified relationships with patients and families as important those NNPs who had a more medical philosophy valued their relationships with physicians more than the others. NNPs with a more nursing philosophy were more satisfied with the relationships they built with parents. Direct patient care or management was an important factor for all NNPs. The more experienced NNPs viewed direct patient care management, procedures, attendance at deliveries, and teaching as most satisfying. Less experienced nurses enjoyed daily management and long term planning for infants and their families. • The most dissatisfying aspects of the NNPs role were: relationships and administrative restraints. They stated that they felt a lack of support and recognition from their colleagues. Less experienced NNPs stated that they wanted more mentorship and support from other NNPs.	

NNPs felt that there was not enough time in a day for clinical activities and there was a lack of support from administrators outside of professional activities. Increased workloads, increased level of patient acuity, poor salaries, and long shifts were also found to be dissatisfying.	
Comments	
• Inclusion criteria were mentioned in the article. • Published in response to the American Nurse's Association mandate for master's level preparation for all NP by the year 2000.	

Table 10 - Is the nurse practitioner role a source of increased work satisfaction?

Source	Purpose of the study	Design, Sample, & Setting	Instrument & Variables
• Bullough, B. (1974)	• To examine if nurses experience a higher level of intrinsic job satisfaction in the extended role as compared to the other nursing roles.	• **Design** • *n*=73 (17 pediatric NPs graduates, 18 extended role nurses, and 38 'other' RNs) • California, USA	• Questionnaire that was answered by the NPs pre and post training. The questionnaire measured: intrinsic job satisfaction (i.e., creativity, importance, use of skills, autonomy, and how interesting their job is) based on the works of Seeman (1967), how satisfied the respondents were with their work, whether the respondents would choose their present job, if they could start all over, and semantic differential scale (i.e., 'uncreative or creative' and 'routine or varied')
Findings		**Implications**	
• Twelve of the 17 NPs were more satisfied with their work after their training than they were before their training. Four felt about the same and 1 felt less satisfied after their training was complete. • There was an increase in the level of job satisfaction among NPs when compared to nurses in extended and 'other' roles. • Respondents viewed nurses in extended roles as having a greater level of skill, creativity, and responsibility than 'other' nurse. Respondents also rate the NP role as more important and interesting. • Majority of all respondents were moderately satisfied with their jobs.		• Nurses' unhappiness with the traditional nursing role may have led nurses to seek further educations and new responsibilities in the NP role. • The low percentage of NPs who would choose nursing as a career again indicates discontent which needs to be further explored.	

• 55% of 'other' nurses stated that they would definitely choose nursing as a career again, whereas 44% of extended role nurses and only 12% of NPs would choose to be nurses again.	
Comments	
• 58% response rate. • Nurses in extended roles include nurse therapists, clinical nurse specialists, primexes, supernurses, and nurse associates.	

Table 11 – Job satisfaction among Arizona adult nurse practitioners

Source	Purpose of the study	Design, Sample, & Setting	Instrument & Variables
• Schiestel, C. (2007)	• To determine the level of job satisfaction among a group of Arizona Adult Nurse Practitioners (ANP).	• A descriptive, nonexperimental design • A convience sample of 155 ANPs (response rate of 47%) • Arizona, USA • Practicing in urban and rural settings	• The Misener Nurse Practitioner Job Satisfaction Scale (MNPJSS) • 44- item self-administered survey that used a 6-point Likert scale (1 is very dissatisfied and 6 is very satisfied) • Cronbach's alpha was .96 and consistent with the original analysis of the MNPJSS.
Findings		**Implications**	
• 93% of the sample was female, aged 40-51 years (43%). • The majority of the ANPs worked full-time (82%) and worked in a private medical practice (36.8%). • Annual incomes ranged from $40,000 to $100,000. • 69% of ANPs reported 10 or fewer years of NP practice and 15% reported having more than 20 years of experience. • ANPs were "minimally satisfied" with their jobs ($M = 4.69$, $SD = .76$). • The difference in the type of employer, gender, annual income, membership in professional nursing organization, or full time versus part-time employment status did not reveal statistically different scores on the job satisfaction variable. • The highest rating on job satisfaction included: challenge/autonomy ($M = 4.99$, $SD = .72$); time ($M = 4.87$, $SD = .92$); and professional, social, and community interaction ($M = 4.71$, $SD = .78$). • The ANPs were less satisfied with: intra-		• The nursing shortage, aging work force, and the shortage of primary care providers have generated an interest among policy makers, health care administrators, employers and professional organizations in exploring what influences an individual to choose and remain in the nursing profession. • Researchers, educators, employers, and the health care system must look beyond their preconceptions of job satisfaction and explore what the individual NP finds satisfying about his or her role.	

practice/collegiality (*M* = 4.44, *SD* = 1.06); professional growth (*M* = 4.43, *SD* = 1.00); and benefits (*M* = 4.47, *SD* = .97).	
Comments	
• Focused on ANPs, therefore, findings cannot be generalized across practice areas. • Relatively small sample size. • The study found that there is no clear explanation of satisfaction or dissatisfaction. • The research suggested that a qualitative study be conducted to yield substantive findings to questions that were left unanswered.	

Table 12 – Nurse practitioner's characteristics and job satisfaction

Source	Purpose of the study	Design, Sample, & Setting	Instrument & Variables
• Wild, P., Parsons, V., & Dietz, E. (2006)	• To identify the demographics, work settings, level of job satisfaction, attitudes towards the work environment, and perceived practice barriers of NPs who are currently working in California.	• A descriptive design using a mail-in questionnaire • Random sample of NPs from California *n*=66 (N=200)	• The Muller McCloskey Satisfaction Scale (MMSS) • 31 questions rated on a 5-poin Likert scale (1 = 'very dissatisfied' and 5 = 'very Satisfied') • Internal consistency, test-retest reliability, and criterion related and construct validity were determined to be acceptable. • Variables include: demographics, work setting, job attitudes, and perceived barriers of NPs.
Findings		**Implications**	
• The majority of NPs were: female, married, Caucasian, worked more than 20 years as an RN, and had an ANP certificate for NPs. • Most of the NPs and ranged from 50-59 years of age and did not have children living at home. • The majority of NPs (42.4%) worked in ambulatory care, other (i.e., schools, corrections, and diabetes health clinic), and acute care settings. • The largest percentage of NPs (27.3%) reported 'other' working clinical settings such as, forensics, pain management, oncology, diabetes clinic, chronic diseases, neurology, and neonatal care. • Most of the NPs (63.6%) reported		• The findings have the potential to guide recruitment and retention strategies of NPs, influence practice issues, and facilitate job satisfaction for NPs already employed by the health care organizations.	

working in a group practice (NP/MD) setting. • NPs reported an overall high level of job satisfaction. • NPs were most satisfied with the following factors: schedules; flexibility of hours; and inter-professional relationships • NPs were least satisfied with the following factors: maternity leave time; child care facilities; social contact with colleagues at work; social contact with colleagues after work; interact professionally with other disciplines; belonging to committees; control over what goes on in the work setting; and opportunities to participate in nursing research • Job satisfaction did not different among NPs in Northern versus Southern California.	
Comments	
• Very small sample size. • The findings are consistent with previous research conducted using the MMSS to describe the level of job satisfaction among NPs. • Very few practice barriers were identified.	

Table 13 – A longitudinal study of advanced practice nursing in Singapore

Source	Purpose of the study	Design, Sample, & Setting	Instrument & Variables
• Kannusamy, P. (2006)	• To describe the first cohort of APNs and to evaluate their role components, job characteristics, and satisfaction with their role.	• A longitudinal study design was used to gather data at 3, 6, and 12 months of intership following the completion of the MN program for the first cohort of APNs in Sigapore. • *n*=15 • 100% response rate at all points of time	• A questionnaire was adapted from a previous study with the permission of the author. • Variables included: demographic information, characteristics of the practice setting, role responsibilities, and aspects of the practice.
Findings		**Implications**	
• The majority of the participants were female (81%) and Chinese (75%). • The mean age of participants was 39.7 year and ranged from 29 to 51 years. • All of the participants worked in an acute care setting on a full time basis. Hours worked ranged from 44-60 hours per week and increased by the 12 month. • Most of participants worked in mental health (44%) and emergency departments (25%). • The time the participants spent in direct patient care ranged from 66.6% at the 3rd month to 65.9% at the 12th month. As the participants' internship progressed they spent less time performing administrative and teaching duties and spent more time focusing on research, projects, and quality improvement initiatives. • By the end of the 12 month internship 81.3% used practice protocols to guide their practice and 68.8% reported helping to develop the practice protocols being used in their area of practice. • The majority of participants were		• APNs are challenged by their ability to balance their role as caregiver, consultant, educator, researcher, and administrator. • APNs will have to work closely with nurse leaders and the medical community so that they can integrate their roles clearly into the health care system. If this is not done the APN may risk being pulled in multiple direction and struggle to meet the expectations of his or her colleagues. • The APNs require the support of their colleagues to be successful in his or her role.	

somewhat satisfied with their role as APN and with the degree of collaboration they had with physicians and other health care professionals, but the level of satisfaction decreased by the 12th month. • Autonomy in patient care, ability to influence clinical care, working in collaboration with the medical team, and recognition and respect from other health care professional were the rewards associated with their APN role. • The participants felt disappointed with the unclear direction of their role, inability to focus solely on clinical care, and lack of support from the health care team which had an impact on their level of satisfaction.	
Comments	
• Poor description of the instrument used to gather the data.	

Appendix B: Questionnaire

Nursing in Rural and Remote Canada

A National Survey

Confidential when completed

Rural and Remote Nursing Study
Box 92, Royal University Hospital
103 Hospital Drive
Saskatoon, Saskatchewan
Canada S7N 0W8

Tel: (306) 966-6260
Fax: (306) 966-8774

Sequence No:

DIRECTIONS FOR MARKING ANSWERS

- Use pencil only - provided. No pens.
- Make the marks heavy and dark.
- Make sure the mark fills the circle.
- If you make a mistake or change your mind, erase carefully.
- Mark only **one** circle for each question unless directed otherwise.
- Write comments on the space provided or on a separate page.

EXAMPLES

WRONG ❍ ❍ Ⓥ ❍ ❍
WRONG Ⓧ ❍ ❍ ❍ ❍
WRONG ❍ ❍ ❍ ◔ ❍

RIGHT ❍ ● ❍ ❍ ❍

INSTRUCTIONS

Read all questions carefully. Be as honest as you can when you answer the questions.

INTRODUCTION

This survey represents a vital first step to examine the nature of nursing practice and the experiences of registered nurses in rural and remote Canada.

The findings of the study will help identify areas of priority for organizational and policy support with respect to the recruitment, retention and education of registered nurses (RNs) in rural and remote Canada. Hopefully, the survey will contribute to improving the work environment for nurses in such settings.

The study is national in scope and is a joint undertaking of researchers and nurses at the Universities of Northern British Columbia, Saskatchewan, Lethbridge, Laurentian, Calgary, Lakehead, Laval, Dalhousie, Queen's, and Manitoba.

It is funded by a research grant from the Canadian Health Services Research Foundation, Nursing Research Fund, the Michael Smith Foundation for Health Research (BC), the Alberta Heritage Foundation for Medical Research, Saskatchewan Economic and Cooperative Development, Ontario Ministry of Health and Long-Term Care, Nova Scotia Health Research Foundation, Nunavut Department of Health and Social Services, the British Columbia Rural and Remote Health Research Institute based in UNBC, and the provincial and territorial nursing associations.

Please answer all questions. Most of the questions have been designed so you can give your answers quickly and easily.

Answer the questions in relation to the nursing position in which you work the most and the community in which you work the most.

Your help is greatly appreciated.

A. Basic Demographic Information

1) Province or territory of residence .....
- ❍ Newfoundland
- ❍ Prince Edward Island
- ❍ Nova Scotia
- ❍ New Brunswick
- ❍ Quebec
- ❍ Ontario
- ❍ Manitoba
- ❍ Saskatchewan
- ❍ Alberta
- ❍ British Columbia
- ❍ Yukon
- ❍ Northwest Territories
- ❍ Nunavut

2) Gender .....
- ❍ Female
- ❍ Male

3) Year of birth ..... 19 __ __

4) Educational background

	Mark all that apply	Year Received	Province or Country Credential Received (eg. Saskatchewan)
Diploma in Nursing	❍ >	_____	_____
Bachelor's Degree in Nursing	❍ >	_____	_____
Bachelor's Degree in Another Field	❍ >	_____	_____
Masters Degree in Nursing	❍ >	_____	_____
Masters Degree in Another Field	❍ >	_____	_____
Doctoral Degree in Nursing	❍ >	_____	_____
Doctoral Degree in Another Field	❍ >	_____	_____
Advanced Nurse Specialist / Nurse Practitioner Diploma	❍ >	_____	_____
Other ..... (Please Specify) _____	❍ >	_____	_____

5) What year were you first licensed to practice as an RN in Canada? _____

6) a. In what province(s) or territory(ies) were you *first* licensed as an RN? _____

b. In what province(s) or territory(ies) are you *currently* licensed? _____

c. How many years have you been licensed to practice as an RN? _____

B. Employment

1) Employment status .....
- ❍ Employed in nursing
- ❍ Employed in other than nursing - seeking employment in nursing
- ❍ Employed in other than nursing - not seeking employment in nursing
- ❍ Not employed and seeking employment in nursing
- ❍ Not employed and not seeking employment in nursing
- ❍ Not stated

2) Do you have more than one nursing position? .....
- ❍ Yes
- ❍ No

3) Nursing employment status (Mark all that apply) .....
- ❍ Full-time/Permanent
- ❍ Part-time/Permanent
- ❍ Job share
- ❍ Casual
- ❍ Contract/Term
- ❍ Not employed

4) Work setting (Mark most appropriate category - choose only one) .....
- ❍ General Hospital
- ❍ Mental health centre
- ❍ Nursing station (outpost/nurse clinic)
- ❍ Rehabilitation/convalescent centre
- ❍ Nursing home/Long term care facility
- ❍ Home care
- ❍ Community health agency
- ❍ Business - industry occupational health
- ❍ Private nursing agency/private duty
- ❍ Integrated facility (acute and long-term care)
- ❍ Self-employed
- ❍ Physician's office/family practice unit
- ❍ Educational institution
- ❍ Association/government
- ❍ Other (specify) _____

5) Hours worked: In the last year, have you worked in nursing?

- ❍ Full-time hours
- ❍ More than full-time hours
- ❍ Less than full-time hours

6) a) Area of current practice (Mark *all* that apply)

- 1 Acute care ❍
- 2 Long term care ❍
- 3 Community health ❍
- 4 Home care ❍
- 5 Primary care ❍
- 6 Administration ❍
- 7 Education ❍
- 8 Research ❍
- 9 Other ❍

(please specify) _____

b) In which of the above practice areas (Question 6a) do you spend most of your time? (Mark only *one*)

❍ 1 ❍ 2 ❍ 3 ❍ 4 ❍ 5 ❍ 6 ❍ 7 ❍ 8 ❍ 9

7) Current position

- ❍ Chief nursing officer/director
- ❍ Assistant/associate director
- ❍ Supervisor
- ❍ Program Coordinator
- ❍ Head nurse/unit manager
- ❍ Staff nurse
- ❍ Community health nurse
- ❍ Office nurse
- ❍ Occupational health nurse
- ❍ Clinical nurse specialist
- ❍ Nurse Practitioner
- ❍ Educator
- ❍ Researcher
- ❍ Consultant
- ❍ Other (please specify) _____

C. COMMUNITY/AGENCY

1) What is your *work* postal code? (first four characters to ensure confidentiality) __ __ __ __ X X

2) How far is your current *work community* from a major centre of 50,000 or greater population?

_____ miles or _____ kilometres

3) Do you consider your workplace remote? ❍ Yes ❍ No

4) Do you consider your workplace rural? ❍ Yes ❍ No

[ANSWER THESE QUESTIONS IN TERMS OF THE RURAL/REMOTE COMMUNITY IN WHICH YOU WORK THE MOST.]

5) Are you currently working in a community only accessible by plane?

❍ Yes ❍ No (Skip to Question 6)

How frequent are scheduled air flights into the community? (Mark one)

❍ Once per day or more
❍ Once per week or more
❍ Once per month or more
❍ No scheduled flights - charter only

6) What type of *ownership* best describes the facility in which you work the most? (Mark one)

❍ Private for profit facility
❍ Private non-profit / not for profit
❍ Local Health Board
❍ Municipal government
❍ Provincial/territorial government
❍ Tribal Council/band
❍ Federal government
❍ Don't know
❍ Other (please specify) _____

7) Do you feel the community is supportive of the health agency you work for?

❍ Very supportive
❍ Somewhat supportive
❍ Neutral
❍ Unsupportive
❍ Very unsupportive

8) At your primary workplace how many RN positions (in full time equivalents) are there including yourself?

Number _____

9) Are nurses the first contact for health care services in your area?

❍ Yes ❍ No

10) Do you use an interpreter to assist you in your work?

❍ Yes ❍ No

11) Which of the following **health services** are available on site in your work community? (Mark all that apply)

	Available Daily	Available Weekly	Available Monthly	Available Every 2 to 6 months	Available Every 7 to 12 months	Not Available
Dental	❍	❍	❍	❍	❍	❍
Physiotherapist	❍	❍	❍	❍	❍	❍
Home care	❍	❍	❍	❍	❍	❍
Hospital	❍	❍	❍	❍	❍	❍
Family physician services	❍	❍	❍	❍	❍	❍
Public health services	❍	❍	❍	❍	❍	❍
Pharmacy services	❍	❍	❍	❍	❍	❍
Occupational Therapy	❍	❍	❍	❍	❍	❍
Mental Health services	❍	❍	❍	❍	❍	❍
Specialist - medical	❍	❍	❍	❍	❍	❍
Nutritionist	❍	❍	❍	❍	❍	❍
Alternative health practitioner	❍	❍	❍	❍	❍	❍

12) Are there family physicians living in the community in which you work the most?

❍ Yes ❍ No

How many? Number _____

13) Do medical specialists (other than family physicians) live in your community?

❍ Yes ❍ No

14) In general how long have the physicians resided in the community? (Mark all that apply)

	# of Physicians
❍ Between 1 and 2 years	_____
❍ Between 2 to 5 years	_____
❍ Between 5 to 10 years	_____
❍ More than 10 years	_____
❍ Don't know	_____

15) Do you work with **student** ....

	Yes	No
physicians	❍	❍
nurses	❍	❍
physiotherapists	❍	❍
other (please specify) _____	❍	❍

16) Do you have direct access in your workplace via the computer to other information sources such as those on the Internet for your use in nursing practice? (This computer usage is not to be confused with using a unit computer for normal client care.)

❍ Yes
❍ No
❍ Don't know

17) Is 'Telehealth' available at your work site? That is the use of advanced telecommunication technologies to exchange health information and provide health care services across geographic and time barriers.

❍ Yes
❍ No
❍ Don't know

How satisfied are you with the availability and use of Telehealth in your area?

Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied
❍	❍	❍	❍

18) Briefly describe any unique characteristics of the clients that you serve, e.g. ethnicity, age, gender, language, poverty, etc.

1. _____
2. _____
3. _____
4. _____
5. _____

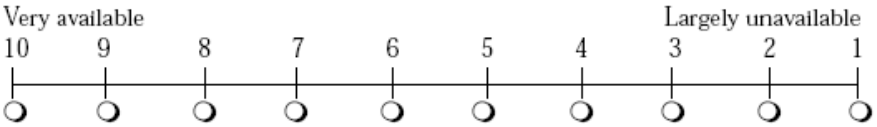
19) Do you have a support network of colleagues who provide consultation and/or professional support?

❍ Yes ❍ No

20) What disciplines are represented in your consultation/professional support network?

❍ Nursing
❍ Medicine (family practice, specialists)
❍ Other health professionals (e.g., pharmacy, physical therapy, dentistry)
❍ Other non-health
❍ Don't have one

21) Are colleagues available to you for consultation when you need them? Indicate availability by filling the circle on the 10-point scale below.



22) On what basis does this contact take place? (Mark all that apply)

❍ Face-to-face
❍ Telephone
❍ E-mail

23) How far is it to the closest *basic referral centre* - that is the closest community with basic specialty services such as general internal medicine, general surgery, ophthamology, orthopedic surgery and radiology?

_____ kms or _____ miles

24) How far is it to the closest *advanced referral centre* - that is, a major metropolitan centre with sub-specialty services such as cardiac surgery, neurosurgery, pediatric surgery, radiation oncology and hematology?

_____ kms or _____ miles

25) How long have you been *employed by your primary agency/institution(s)*?

❍ Less than 2 years
❍ 2 - 5 years
❍ 6 -9 years
❍ 10 - 14 years
❍ 15 - 19 years
❍ 20 years or more

26) How long have you held *your current primary position*?

- ❍ Less than 2 years
- ❍ 2 - 5 years
- ❍ 6 - 9 years
- ❍ 10 - 14 years
- ❍ 15 - 19 years
- ❍ 20 years or more

27) Would you say:

	Agree	*Agree somewhat*	*Disagree somewhat*	*Disagree*	*Not applicable*
a. I am happy with the community in which I work.	❍	❍	❍	❍	❍
b. I am frequently recognized in public by clients.	❍	❍	❍	❍	❍
c. I am bothered when I am recognized in public by clients.	❍	❍	❍	❍	❍
d. When I'm not at work, people frequently ask me for professional advice.	❍	❍	❍	❍	❍
e. I am bothered when people ask for professional advice when I'm not at work.	❍	❍	❍	❍	❍

28) What is the population of the place in which you *live*?

- ❍ Farm/acreage
- ❍ 200 or less
- ❍ 201 - 500
- ❍ 501 - 1,000
- ❍ 1,001 - 2,500
- ❍ 2,501 - 5,000
- ❍ 5,001 - 10,000
- ❍ 10,001 - 20,000
- ❍ 20,001 - 50,000
- ❍ 50,001 - 75,000
- ❍ Over 75,000

29) What is the population of the village/town/city in which you *work*?

- ❍ 200 or less
- ❍ 201 - 500
- ❍ 501 - 1,000
- ❍ 1,001 - 2,500
- ❍ 2,501 - 5,000
- ❍ 5,001 - 10,000
- ❍ 10,001 - 20,000
- ❍ 20,001 - 50,000
- ❍ 50,001 - 75,000
- ❍ Over 75,000

30) What is your home postal code? (first four characters to ensure confidentiality) __ __ __ __ X X

31) How satisfied are you with the following aspects of your home community (where you live) at this time? (Rate each dimension on a five-point scale from 'not satisfied' to 'very satisfied'.)

	Not satisfied 1	2	3	4	Very satisfied 5
a. Friendly community	❍	❍	❍	❍	❍
b. Trusting community	❍	❍	❍	❍	❍
c. Social/recreational opportunities	❍	❍	❍	❍	❍
d. Friends	❍	❍	❍	❍	❍
e. Quality of schools (K-12)	❍	❍	❍	❍	❍
f. Safety	❍	❍	❍	❍	❍
g. Ability to stay current in your practice	❍	❍	❍	❍	❍
h. Level of anonymity	❍	❍	❍	❍	❍
i. Consulted on work issues outside of work	❍	❍	❍	❍	❍
j. Size of community	❍	❍	❍	❍	❍
k. Distance away from major centre	❍	❍	❍	❍	❍
l. Overall community satisfaction	❍	❍	❍	❍	❍

D. Hours of Work/Stability/Benefits

1) What hours do you work most often?
- ❍ Days (8 hour)
- ❍ Days (12 hour)
- ❍ Evenings (8 hour)
- ❍ Nights (8 hour)
- ❍ Nights (12 hour)
- ❍ Rotating (8 hour)
- ❍ Rotating (12 hour)
- ❍ Other (please specify) _____

Scheduling

2) In my work situation:	*Agree*	*Agree somewhat*	*Disagree somewhat*	*Disagree*	*Not applicable*
a. My work schedule is satisfactory	❍	❍	❍	❍	❍
b. I am satisfied with the number of hours I work	❍	❍	❍	❍	❍
c. I am satisfied with the flexibility in overall scheduling	❍	❍	❍	❍	❍

	Agree	Agree somewhat	Disgree somewhat	Disagree	Not applicable
d. I am satisfied with the shifts I work.	❍	❍	❍	❍	❍
e. I am satisfied with my rotation.	❍	❍	❍	❍	❍
f. I am satisfied with the flexibility in scheduling weekends/days off.	❍	❍	❍	❍	❍
g. I am satisfied with the amount of overtime I'm required to work.	❍	❍	❍	❍	❍

Would you prefer to work more or less overtime?

- ❍ More
- ❍ About the same
- ❍ Less

3) Are you required to be on call for your work?

- ❍ Yes > How many hours per month? _____
- ❍ No

Comment: _____

_____

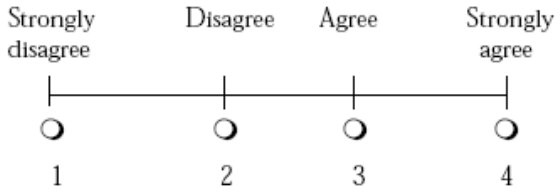
4) Does your work situation allow you flexibility in responding to family obligations? Indicate by filling in circle on the 5-point scale below your work place's flexibility.

Very flexible and accommodating		Flexible for some obligations		Inflexible
❍	❍	❍	❍	❍
1	2	3	4	5

5) How steady is your work? (Mark *one*)

- ❍ Regular and steady
- ❍ Seasonal
- ❍ Frequent layoffs
- ❍ Both seasonal and frequent layoffs
- ❍ Other (please specify) _____

6) My job security is good.



7) In your main area of work:

a. If you are employed on a casual basis (i.e., non-permanent), is this by your choice?

- ❍ Yes
- ❍ No (Skip to Question 8)
- ❍ Not applicable (Skip to Question 8)

b. How long have you been casual? _____ Years _____ Months

c. Have you been laid off in the last 5 years? ❍ Yes ❍ No (Skip to Question 8)

d. How many times were you laid off in the last 5 years? _____ times

e. Were you rehired by the same organization? ❍ Yes ❍ No

8) Have you changed organizations or positions in the last 5 years *due to downsizing*?

- ❍ Yes, my choice
- ❍ Yes, required by organization
- ❍ No

9) How adequate was the orientation provided by your current organization to meet your learning needs?

- ❍ Not at all adequate
- ❍ Somewhat adequate
- ❍ Mostly adequate
- ❍ Very adequate

10) How many hours per month do you spend travelling *to* your main nursing job?

_____ Hours _____ Minutes ❍ Not applicable

11) In a typical day how much time do you spend travelling *as part* of your job?

_____ Hours _____ Minutes ❍ Not applicable

12) What is the impact of work-related travel on your life?

Travel to work: _____

_____

_____

Travel for work: _____

_____

_____

Benefits

13) *Which benefits do you currently receive from your employer/contractor?*

14) *Indicate level of importance to you.*

	Yes	No		Very important ↓	Important ↓	Neutral ↓	Unimportant ↓	Very unimportant ↓
a) Extended health insurance	❍	❍	→	❍	❍	❍	❍	❍
b) Dental insurance	❍	❍	→	❍	❍	❍	❍	❍
c) Daycare (child/elder)	❍	❍	→	❍	❍	❍	❍	❍
d) Vacation/holidays	❍	❍	→	❍	❍	❍	❍	❍
e) Sick/maternity leave	❍	❍	→	❍	❍	❍	❍	❍
f) Tuition reimbursement	❍	❍	→	❍	❍	❍	❍	❍
g) Isolation allowance	❍	❍	→	❍	❍	❍	❍	❍
h) Banked time	❍	❍	→	❍	❍	❍	❍	❍
i) Payment of provincial/territorial health care premium (if not applicable, leave blank)	❍	❍	→	❍	❍	❍	❍	❍
j) Continuing education support	❍	❍	→	❍	❍	❍	❍	❍
k) Travel and sustenance support to facilitate continuing education	❍	❍	→	❍	❍	❍	❍	❍
l) Professional registration fee	❍	❍	→	❍	❍	❍	❍	❍
m) Family day leave	❍	❍	→	❍	❍	❍	❍	❍
n) Pension benefits	❍	❍	→	❍	❍	❍	❍	❍

		Yes	No		Very important	Important	Neutral	Unimportant	Very unimportant
o)	Salary continuance plan for chronic illness	❍	❍	→	❍	❍	❍	❍	❍
p)	Employer's vehicle for work related travel	❍	❍	→	❍	❍	❍	❍	❍
q)	Cell/mobile phone	❍	❍	→	❍	❍	❍	❍	❍
r)	Other (please specify)	❍	❍	→	❍	❍	❍	❍	❍

E. Nursing Practice

1) Do you regularly perform any of the following nursing procedures as part of your *current nursing practice*? Mark *all* that apply.

		Yes	No
a.	Pre-natal care	❍	❍
b.	Management of labor	❍	❍
c.	Management of delivery	❍	❍
d.	Immunizations	❍	❍
e.	Post-natal care	❍	❍
f.	Suturing	❍	❍
g.	Taking x-rays	❍	❍
h.	Dispensing (not administrating) medication	❍	❍
i.	Prescribing medication	❍	❍
j.	Audiometry	❍	❍
k.	Refraction	❍	❍
l.	Casting/splinting	❍	❍
m.	Ordering diagnostic tests	❍	❍
n.	Performing diagnostic tests	❍	❍
o.	Interpreting diagnostic tests	❍	❍
p.	Pulmonary function testing	❍	❍
q.	Performing pap smears	❍	❍
r.	Joint injection / aspiration	❍	❍
s.	Needle aspiration (for diagnosis/biopsy)	❍	❍
t.	Culturing tissue samples	❍	❍
u.	Evacuating patients	❍	❍

	Yes	No
v. Direct referral to an allied health professional (e.g. physiotherapist)	❍	❍
w. Direct referral to a medical specialist	❍	❍
x. Pronouncing death	❍	❍
y. Other _____	❍	❍

_____

2) With respect to the above nursing procedures (Question E1) which, if any, have required certification by your employer? ❍ None

Item Letter	Description
_____	_____
_____	_____
_____	_____

3) Have you facilitated health promotion activities in your community?

❍ Yes ❍ No

Give an example: _____

_____

4) Are there nursing practice and decision-making skills that you perform on an advanced level in your area of practice? ❍ Yes ❍ No (Skip to Question 5)

Please explain: _____

_____

_____

5) Which of the following best describes your *average* day of practice? (Please mark all responses which you believe reflect your role)

- I am required to work with many different kinds of patients ..... ❍
- Nothing in my day is routine, the workload dictates my role ..... ❍
- I use protocols specific to advanced nursing practice ..... ❍
- I usually have one nursing role but am required to take on other roles depending on demand ..... ❍
- I think of my role as advanced nursing practice ..... ❍

F. Attitudes about Nursing

The following items represent statements about how satisfied you are with YOUR MAIN CURRENT NURSING POSITION. Please respond to each item. It may be difficult to fit your responses into the eight categories. In that case, select the category that *comes closest* to your response to the statement. It is very important that you give your *honest* opinion. Please do not go back and change any of your answers.

	Strongly agree	*Agree*	*Mildly or somewhat agree*	*Undecided*	*Mildly or somewhat disagree*	*Disagree*	*Strongly disagree*	*Not applicable*
1) My present salary is satisfactory.	❍	❍	❍	❍	❍	❍	❍	❍
2) The nursing personnel in this organization do not hesitate to pitch in and help one another out when things get in a rush.	❍	❍	❍	❍	❍	❍	❍	❍
3) Physicians in general cooperate with nursing staff at my organization.	❍	❍	❍	❍	❍	❍	❍	❍
4) New employees are not quickly made to feel at home in this organization	❍	❍	❍	❍	❍	❍	❍	❍
5) I have no doubt in my mind that what I do on my job is really important.	❍	❍	❍	❍	❍	❍	❍	❍
6) There is a great gap between the administration of this organization and the daily problems of the nursing service.	❍	❍	❍	❍	❍	❍	❍	❍
7) Considering what is expected of nursing personnel at this organization, the pay we get is reasonable.	❍	❍	❍	❍	❍	❍	❍	❍
8) A good deal of teamwork is present between various levels of nursing personnel in this organization	❍	❍	❍	❍	❍	❍	❍	❍
9) I have too much responsibility and not enough authority.	❍	❍	❍	❍	❍	❍	❍	❍
10) This organization offers opportunities for advancement/promotion.	❍	❍	❍	❍	❍	❍	❍	❍
11) There is a lot of teamwork between nurses and doctors at my organization.	❍	❍	❍	❍	❍	❍	❍	❍
12) The present rate of pay for nursing service personnel at this organization is not satisfactory.	❍	❍	❍	❍	❍	❍	❍	❍
13) The nursing personnel in this organization are not as friendly and outgoing as I would like.	❍	❍	❍	❍	❍	❍	❍	❍
14) There is ample opportunity for nursing staff to participate in the administrative decision-making process.	❍	❍	❍	❍	❍	❍	❍	❍
15) A great deal of independence is permitted, if not required, of me.	❍	❍	❍	❍	❍	❍	❍	❍

	Strongly agree	Agree	Mildly or somewhat agree	Undecided	Mildly or somewhat disagree	Disagree	Strongly disagree	Not applicable
16) What I do on my job does not add up to anything really significant.	❍	❍	❍	❍	❍	❍	❍	❍
17) There is a lot of "rank consciousness" in this organization: nurses seldom mingle with those with less experience or with other professionals or staff.	❍	❍	❍	❍	❍	❍	❍	❍
18) I am sometimes frustrated because all of my activities seem programmed for me.	❍	❍	❍	❍	❍	❍	❍	❍
19) I am sometimes required to do things on my job that are against my better professional nursing judgement.	❍	❍	❍	❍	❍	❍	❍	❍
20) Based on feedback from nurses in other organizations, the pay at this organization is fair.	❍	❍	❍	❍	❍	❍	❍	❍
21) I am proud to talk to other people about what I do on my job.	❍	❍	❍	❍	❍	❍	❍	❍
22) I wish the physicians here would show more respect for the skill and knowledge of the nursing staff.	❍	❍	❍	❍	❍	❍	❍	❍
23) Physician(s) working with this organization generally understand and appreciate what the nursing staff does.	❍	❍	❍	❍	❍	❍	❍	❍
24) If I had the decision to make all over again, I would still go into nursing.	❍	❍	❍	❍	❍	❍	❍	❍
25) The physician(s) working at this agency look down too much on the nursing staff.	❍	❍	❍	❍	❍	❍	❍	❍
26) I have all the voice in planning policy and procedures that I want.	❍	❍	❍	❍	❍	❍	❍	❍
27) My particular job really doesn't require much skill or "know-how".	❍	❍	❍	❍	❍	❍	❍	❍
28) The nursing administrators generally consult with the staff on daily problems and procedures.	❍	❍	❍	❍	❍	❍	❍	❍
29) I have the support of my supervisor to make important decisions in my work.	❍	❍	❍	❍	❍	❍	❍	❍
30) Pay scales for nursing personnel need to be upgraded	❍	❍	❍	❍	❍	❍	❍	❍
31) Overall, I am very satisfied with my job.	❍	❍	❍	❍	❍	❍	❍	❍

G. About Your Nursing Position

The following are statements concerning your *current nursing position*. Please answer each question by marking off the one answer that best fits your current situation. Sometimes none of the answers fit exactly; please choose the answer that comes closest.

		Strongly agree	Agree	Disagree	Strongly disagree
1)	My nursing position requires that I learn new things	❍	❍	❍	❍
2)	My nursing position involves a lot of repetitive work	❍	❍	❍	❍
3)	My nursing position requires me to be creative.	❍	❍	❍	❍
4)	My nursing position allows me to make a lot of decisions on my own.	❍	❍	❍	❍
5)	My nursing position requires a high level of skill.	❍	❍	❍	❍
6)	On my job, I have very little freedom to decide how I do my work.	❍	❍	❍	❍
7)	I get to do a variety of different things in my job.	❍	❍	❍	❍
8)	I have a lot of say about what happens on my job.	❍	❍	❍	❍
9)	I have an opportunity to develop my own special abilities.	❍	❍	❍	❍
10)	My job requires working very fast	❍	❍	❍	❍
11)	My job requires working very hard.	❍	❍	❍	❍
12)	My job requires lots of physical effort.	❍	❍	❍	❍
13)	I am not asked to do an excessive amount of work.	❍	❍	❍	❍
14)	I have enough time to get the job done.	❍	❍	❍	❍
15)	I am free from conflicting demands that others make	❍	❍	❍	❍

16) What is the most important thing to you about your nursing position?

_____

_____

_____

_____

H. Your Health

Please rate your level of satisfaction with your general health.

1) Are you satisfied or dissatisfied with:

	Very satisfied	Somewhat satisfied	Somewhat dissatisfied	Very dissatisfied
Your health	❍	❍	❍	❍
Your job or main activity	❍	❍	❍	❍
Your life in general	❍	❍	❍	❍

2) In general, would you say your health is:
- ❍ Excellent
- ❍ Very good
- ❍ Good
- ❍ Fair
- ❍ Poor

3) The following questions are about activities you might do during a typical day. Does *your health now limit you* in these activities? If so, how much?

	Yes, limited a lot	Yes, limited a little	No, not limited at all
a. **Moderate activities**, such as moving a table, pushing a vacuum cleaner, gardening, or playing sports (curling, golf)	❍	❍	❍
b. Climbing **several** flights of stairs.	❍	❍	❍

4) During the **past 4 weeks**, have you had any of the following problems with your work or other regular daily activities **as a result of your physical health**?

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
a. Accomplished less than you would like.	❍	❍	❍	❍	❍
b. Were limited in the kind of work or other activities.	❍	❍	❍	❍	❍

5) During the **past 4 weeks**, have you had any of the following problems with your work or other regular daily activities as a **result of any emotional problems** (such as feeling depressed or anxious)?

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
a. **Accomplished less** than you would like.	❍	❍	❍	❍	❍
b. Did work or other activities **less carefully than usual.**	❍	❍	❍	❍	❍

6) During the **past 4 weeks**, how much did **pain** interfere with your normal work (including both work outside the home and housework)?

Not at all	A little bit	Moderately	Quite a bit	Extremely
❍	❍	❍	❍	❍

7) These questions are about how you feel and how things have been with you during the **past 4 weeks**. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the **past 4 weeks** ....

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
a. have you felt calm and peaceful?	❍	❍	❍	❍	❍
b. did you have a lot of energy?	❍	❍	❍	❍	❍
c. have you felt down-hearted and depressed?	❍	❍	❍	❍	❍

8) During the **past 4 weeks**, how much of the time has your **physical health or emotional problems** interfered with your social activities (like visiting friends, relatives, etc.)?

All of the time	Most of the time	Some of the time	A little of the time	None of the time
❍	❍	❍	❍	❍

9) Have you ever taken a sick day due to stressors experienced on the job ('mental health day')?

❍ Yes > How many days in the last year? _____

❍ No

10) Have you ever taken a formal (paid) stress leave? ❍ Yes ❍ No (Skip to Section I)

What caused the stress leave?

❍ Personal/family emotional stress

❍ Critical incident stress

❍ Other work related stress

I. Your Feelings and Thoughts During the Last Month

We'd like you to tell us **how often** you felt or thought a certain way. The best way is to answer each question fairly quickly; don't try to count up the number of times you felt a certain way, just mark the choice that seems like a reasonable estimate.

For each question fill in the circle for the category that corresponds to your answer.

		Never	*Almost never*	*Sometimes*	*Fairly often*	*Very often*
1)	In the last month, how often have you felt that you were *not able to control* the important things in your life?	❍	❍	❍	❍	❍
2)	In the last month, how often have you *felt confident* about your ability to handle your personal problems?	❍	❍	❍	❍	❍
3)	In the last month, how often have you felt that *things were going your way*?	❍	❍	❍	❍	❍
4)	In the last month, how often have you felt *difficulties were piling up* so high that you could not overcome them?	❍	❍	❍	❍	❍

J. About your Workplace

Staffing

1) Thinking about your primary workplace, do you agree or disagree with the following statements?

	Agree	*Agree somewhat*	*Disagree somewhat*	*Disagree*	*Not applicable*
a. There is adequate RN staffing	❍	❍	❍	❍	❍
b. There is adequate support staff	❍	❍	❍	❍	❍
c. The "staff mix" is appropriate	❍	❍	❍	❍	❍

Environment at Work

			Agree	Agree somewhat	Disagree somewhat	Disagree	Not applicable
2)	a.	The equipment needed for care is available.	❍	❍	❍	❍	❍
	b.	The equipment needed for care is up-to-date	❍	❍	❍	❍	❍
	c.	Equipment is maintained and ready for use.	❍	❍	❍	❍	❍
	d.	The personnel are trained to use the available equipment	❍	❍	❍	❍	❍
	e.	The work area is too noisy.	❍	❍	❍	❍	❍
	f.	Nursing care supplies are available when needed.	❍	❍	❍	❍	❍
	g.	I feel physically safe during the day while at work.	❍	❍	❍	❍	❍
	h.	I feel physically safe during the evening/night while at work.	❍	❍	❍	❍	❍

Violence in the Workplace

The intent of this series of questions is to gain an understanding of the amount and type of violence experienced by nurses in the workplace. **Please use the following definition of violence as you answer these questions.**

Violence against nurses or nurse abuse is defined in this study as an incident where a nurse experiences any of the following:

- physical assault (e.g. being spit on, bitten, hit, pushed)
- threat of assault (verbal or written threats intending harm)
- emotional abuse such as hurtful attitudes or remarks (insults, gestures, humiliation before the work team, coercion)
- verbal sexual harassment (repeated, unwanted intimate questions or remarks of a sexual nature)
- sexual assault (any forced physical sexual contact including forcible touching and fondling, any forced sexual acts including forcible intercourse)

The time period is the past 4 weeks you worked.

3) In the *past 4 weeks that you worked*, did you experience any of the following while carrying out your responsibilities as a nurse? **Indicate all that apply** and the type of person(s) who was(were) the **perpetrator(s) of the incident(s).**

					PERPETRATOR					
		NO	YES		Patient/ Client	Family/ Visitor	Physician	Nursing Co-worker	Community Member	Other
a.	Physical assault	❍	❍	>	❍	❍	❍	❍	❍	❍
b.	Threat of assault	❍	❍	>	❍	❍	❍	❍	❍	❍
c.	Emotional abuse	❍	❍	>	❍	❍	❍	❍	❍	❍
d.	Verbal / sexual harassment	❍	❍	>	❍	❍	❍	❍	❍	❍
e.	Sexual assault	❍	❍	>	❍	❍	❍	❍	❍	❍

↓

If all NO skip to Section K, page 24.

Comment:

_____

_____

_____

4) If the perpetrator was a patient/client, what was their primary diagnosis? .....
- ❍ Alcohol/drug problem
- ❍ Other psychiatric
- ❍ Dementia
- ❍ Other diagnoses
- ❍ Not applicable

5) What was the most frequent context of the above incident(s) in your workplace? ..... (Mark appropriate answer)
- ❍ Admission
- ❍ Personal care
- ❍ Social activity
- ❍ Talking to client
- ❍ Unprovoked - no care being given
- ❍ Other (specify)

_____

6) Consider ***the most distressing incident*** at work and then decide how accurate each statement is i describing how you felt.

		Agree strongly	*Agree moderately*	*Mixed/Not sure*	*Disagree moderately*	*Disagree strongly*
a.	I never expected this to happen to me.	❍	❍	❍	❍	❍
b.	I feared for my life.	❍	❍	❍	❍	❍
c.	I was afraid I would be seriously injured.	❍	❍	❍	❍	❍
d.	My sleep was disturbed by this incident.	❍	❍	❍	❍	❍
e.	The perpetrator became aggressive with me because my racial origin is different from theirs.	❍	❍	❍	❍	❍
f.	I needed emotional support after this incident.	❍	❍	❍	❍	❍
g.	I expect to be hit by clients, it is just part of the job.	❍	❍	❍	❍	❍
h.	I want education on how to deal effectively with aggressive clients.	❍	❍	❍	❍	❍

Comments:

_____

_____

_____

_____

_____

_____

K. Nursing Knowledge

1) Please mark whether you *agree*, *somewhat agree*, *somewhat disagree* or *disagree* with the following statements:

	Agree	*Agree somewhat*	*Disagree somewhat*	*Disagree*	*Not applicable*
a. I feel my knowledge is current	❍	❍	❍	❍	❍
b. I have access to current information that would help me in my job.	❍	❍	❍	❍	❍
c. I know how to operate any special equipment where I work.	❍	❍	❍	❍	❍
d. There is always someone I can call to help me with equipment problems.	❍	❍	❍	❍	❍
e. Adequate orientation is provided for nurses changing practice areas.	❍	❍	❍	❍	❍
f. I have enough opportunities to attend continuing education/ staff development events	❍	❍	❍	❍	❍
g. My employer encourages staff to attend continuing education/ staff development events.	❍	❍	❍	❍	❍
h. I have opportunities to share with others what I have learned at continuing education/staff development events.	❍	❍	❍	❍	❍

2) In the last **twelve months** have you undertaken any of the following activities associated with your work (please mark all that apply)?

	Yes	No
a. Subscribed to a journal	❍	❍
b. Read a journal article	❍	❍
c. Read a 'professional' textbook	❍	❍
d. Participated in a Telehealth conference	❍	❍
e. Done a computer-based literature search on a nursing/disease topic	❍	❍
f. Enrolled in/completed a course at a University	❍	❍
g. Enrolled in/completed a course at a Community College	❍	❍
h. Other	❍	❍

(Please specify _____)

3) How do you get *new* information on nursing practice? Indicate which sources you find most useful.

	Don't use	Use		USEFULNESS: Very useful	Somewhat useful	Not particularly useful	Useless
a. Internet	❍	❍	>	❍	❍	❍	❍
b. Library	❍	❍	>	❍	❍	❍	❍
c. Newsletter	❍	❍	>	❍	❍	❍	❍
d. Journal subscription	❍	❍	>	❍	❍	❍	❍
e. Journal club	❍	❍	>	❍	❍	❍	❍
f. Nursing colleagues	❍	❍	>	❍	❍	❍	❍
g. Inservice at work	❍	❍	>	❍	❍	❍	❍
h. Continuing education programs outside workplace	❍	❍	>	❍	❍	❍	❍
i. Other work colleagues (non-nursing)	❍	❍	>	❍	❍	❍	❍
j. Other	❍	❍	>	❍	❍	❍	❍

(Please specify) _____

4) a. Do you perceive barriers to your participation in continuing education?

❍ Yes ❍ No (Skip to Section L)

b. What are those barriers?

_____

_____

_____

L. Career Plans

1) Thinking about the next 12 months, how likely do you think it is that you will lose your job or be laid off?
- ❍ Very likely
- ❍ Fairly likely
- ❍ Not too likely
- ❍ Not at all likely

2) Do you plan to leave your present nursing position?
- ❍ Yes, within the next 6 months
- ❍ Yes, within the next 12 months
- ❍ No plans within the next year

3) If you were looking for another job, how easy or difficult do you think it would be for you to find a satisfactory job in nursing?
- ❍ Very easy
- ❍ Fairly easy
- ❍ Fairly difficult
- ❍ Very difficult

4) Thinking about the next five years, do you plan to: (Mark *all* that apply)
- ❍ Continue nursing in the same location
- ❍ Relocate within the province where you are currently nursing
- ❍ Relocate to nurse in another province in Canada
- ❍ Leave Canada to nurse in another country
- ❍ Go back to school for further education and training *within* nursing
- ❍ Go back to school for further education and training *outside of nursing*
- ❍ Move because of family commitments
- ❍ Move from a rural/isolated community to a large community
- ❍ Retire
- ❍ None of the above

5) Have you been employed outside of nursing in the last 2 years? ❍ Yes ❍ No

6) In your community or nearby are there attractive employment opportunities *outside* of nursing? ❍ Yes ❍ No

7) In your community or nearby are there attractive employment opportunities *in* nursing? ❍ Yes ❍ No

8) How long do you expect to stay in your present job?
- ❍ Less than 1 year
- ❍ 1 - 2 years
- ❍ 2 - 4 years
- ❍ 5 or more years

9) Have you looked for other employment opportunities within the past year?
- ❍ Yes → ❍ In nursing
  - ❍ Non nursing
  - ❍ Both
- ❍ No

M. Additional Demographic Questions

1) What size of community did you grow up in?

- ❍ Less than 200
- ❍ 201 - 500
- ❍ 501 - 1,000
- ❍ 1,001 - 2,500
- ❍ 2,501 - 5,000
- ❍ 5,001 - 10,000
- ❍ 10,001 - 20,000
- ❍ 20,001 - 50,000
- ❍ 50,001 - 75,000
- ❍ Over 75,001

2) Are you a Canadian Citizen?

- ❍ Yes (Skip to Question 3)
- ❍ No

↓

Do you have landed immigrant status?

- ❍ Yes (Skip to Question 3)
- ❍ No

↓

Are you in Canada on a work permit?

- ❍ Yes
- ❍ No

3) Are you of Aboriginal or Metis ancestry? .....

- ❍ Yes
- ❍ No

4) Do you have any dependent children or other dependent relatives who live with you? .....

- ❍ Yes → How many _____
- ❍ No

5) Current marital status? .....

- ❍ Married
- ❍ Living with partner
- ❍ Single
- ❍ Divorced
- ❍ Widowed

6) If currently married or living with partner, what is their occupation?

_____

7) Here is a list of gross (before taxes and deductions) categories that correspond to various income levels. What is your current income from *nursing* in the past year (including overtime)?

Yearly	Monthly
❍ Less than $9,999	Up to $833
❍ $10,000 to $19,999	$834 - $1,666
❍ $20,000 to $29,999	$1,667 - $2,499
❍ $30,000 to $39,999	$2,500 - $3,333
❍ $40,000 to $49,999	$3,334 - $4,166
❍ $50,000 to $59,999	$4,167 - $4,999
❍ $60,000 to $69,999	$5,000 - $5,833
❍ $70,000 or more	$5,834 +

8) What percentage of your *nursing income* was from overtime work? __ __ %

9) What percentage of your *nursing income* was from isolation allowances? __ __ %

10) What is your best estimate of the **total income** from all sources (eg. jobs, social security, investments, etc.), before taxes and other deductions, of *all household members* in the past 12 months? (For small businesses and farms **after** expenses.)

Yearly	Monthly
❍ Less than $9,999	Up to $833
❍ $10,000 to $19,999	$834 - $1,666
❍ $20,000 to $29,999	$1,667 - $2,499
❍ $30,000 to $39,999	$2,500 - $3,333
❍ $40,000 to $49,999	$3,334 - $4,166
❍ $50,000 to $59,999	$4,167 - $4,999
❍ $60,000 to $69,999	$5,000 - $5,833
❍ $70,000 to $79,999	$5,834 - $6,666
❍ $80,000 to $99,999	$6,667 - $8,333
❍ $100,000 to $119,999	$8,334 - $9,999
❍ $120,000 +	$10,000 +

N. Comments

Reflections on your role as a rural/remote nurse.

1) How do you define rural/remote?

2) What was your reason for accepting your present position?

3) In what way is your role as a rural/remote nurse different from other nursing roles you have had?

4) How has your education prepared you for your job as a *rural or remote nurse*? Did some elements of your training and education prepare you well? Were other elements of your training and education not particularly useful? Please comment.

5) Do you have any final comments - either complaints, problems or positive experiences about nursing in rural or remote Canada?

_____

_____

_____

_____

_____

_____

_____

_____

PLEASE FEEL FREE TO WRITE ADDITIONAL COMMENTS AND ATTACH.

RESPONDENTS WHO WISH TO VERBALLY RELATE THEIR EXPERIENCES OR WRITE ABOUT THEM ARE INVITED TO CONTACT STUDY INVESTIGATORS AT 1-866-960-6409 OR AT *http://ruralnursing.unbc.ca* AS THEY ARE COLLECTING MORE DETAILED NARRATIVE COMMENTS.

General comments about this questionnaire.

_____

_____

_____

_____

_____

_____

_____

_____

THANK YOU

Appendix C: Cover letter

The Nature of Nursing Practice in Rural and Remote Canada

September 2001

Dear Nursing Colleague:

We are writing to ask your help in a study on nursing in rural and remote Canada. We wish to learn more about nurses in rural and remote Canada: Who are they? What is the nature of nursing practice in rural and remote areas? How satisfied are they with their current work situations and the profession of nursing?

It is our understanding that you are a registered nurse practicing in a rural or remote part of Canada. Provincial nursing associations identified such nurses from their registration lists. Though this study is being independently conducted by university based researchers, provincial nursing associations are interested in the findings from the study, have endorsed it, and are facilitative our research efforts by mailing this questionnaire.

This survey will be used to inform policy and program development with regard to nursing in rural and remote areas. By knowing more about the job skills and nursing practice of rural/remote nurses, health agencies, educators and the nursing profession can make the most of what these nurses do to contribute to the health of their communities and do a better job of improving the work environment and quality of working life.

The results of the survey will form the basis of a report to the funding agencies and various governing bodies. An executive summary will be made widely available to study participants (upon request, see enclosed form), the media and will be available on the study website (see below). Various aspects of the survey results will also form the basis of articles submitted to peer-reviewed journals for publication.

Your answers are completely anonymous and confidential, and will be released only as summaries in which no individual's answers can be identified. As the provincial nursing associations mail the questionnaire, we do not know the identity of any of those whom this questionnaire is being sent. When you return your completed questionnaire in the enclosed stamped envelope, the sequence number on the envelope is used to delete your name from the nursing association's mailing list for the survey. Your name is never connected to your answers in any way. This survey is voluntary, however, your input is invaluable. It would be greatly appreciated is you can help us by taking about forty-five minutes to share your experiences and opinions with us. If for some reason you prefer not to respond, please let us know by returning the blank questionnaire in the enclosed stamped envelope.

Please complete the enclosed questionnaire using the special pencil provided, and keep it as a small token of appreciation, as a way of saying thanks for your help.

If you have any questions or comments about this survey, we would be happy to talk with you. Our number is **(306) 966-6260 (collect)**, or you can fax or write us at either address at the bottom of this letter.

For more details on the study check our website at **http://ruralnursing.unbc.ca**.

Thank you very much for helping with this important study.

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