JOB SATISFACTION AND ROLE CONFLICT AMONG COMMUNITY HEALTH NURSES

By

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We accept this thesis as conforming to the required standard

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ABSTRACT

A descriptive correlation design was used to assess the level of job satisfaction and role conflict of community health nurses in the province of British Columbia, and to examine the relationship between these two constructs and age, length of job tenure, experience in nursing, and educational background. Although other studies have reported on decreased levels of job satisfaction among American community health nurses, decreased job satisfaction among community health nurses in British Columbia has not been associated with increased personnel turnover. This relationship between job satisfaction and turnover rate was inconsistent with that found among hospital nurses and community health nurses in the United States.

The role episode model (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964) was used as a framework for the study. The findings from the data collected through a mail-out survey using the McCloskey/Mueller Satisfaction Scale (MMSS)(Mueller & McCloskey, 1990) and the Abridged Role Questionnaire (Rizzo, House, & Lirtzman, 1970). The data from a total of 123 mail-out surveys was used in the analysis.

The community health nurses were satisfied in their work role and had moderate levels of role conflict. They were most satisfied with the measures of scheduling, extrinsic rewards, and coworkers. They were least satisfied with the measures of control and responsibility, balance of family and work, and
professional opportunities. Praise and recognition, and control and responsibility were found to have the greatest impact on the nurses’ ability to adapt to role conflict. Balance of family and work, and professional opportunities were found to have a minimal impact. However, role conflict was reduced by an increase in satisfaction with any of the measures.

The community health nurse’s level of role conflict was not influenced by age, length of job tenure, educational background, or experience in nursing. However, the greater the age, the greater the satisfaction with extrinsic rewards; the lower the educational preparation, the greater the satisfaction with control and responsibility; and, the greater the length of job tenure, the greater the satisfaction with professional opportunities.

The knowledge about the factors that influence job satisfaction of community health nurses reported in this study will assist community health nurses to substantiate job needs to their employers. In addition, it will benefit nurse managers in maintaining sources of job satisfaction, foster job development needs, and reduce forces that lead to role conflict.
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Dedication

I dedicate this thesis to my husband, Bob, and to my children, Alex and Alanna, who are second to none.
CHAPTER ONE

INTRODUCTION

The expansion of the role of the community health nurse to include a greater emphasis on health promotion has already been implemented by the City of Vancouver and the North Shore Health Departments. It is likely that this trend will continue to other municipal and provincial health departments in British Columbia with the recent increase in the number of community health nursing positions and support for health promotion by the British Columbia Royal Commission on Health Care and Costs (1991). Therefore, the role expectations of the community health nurses will change. Community health nurse administrators need to be proactive in recognizing and dealing with the impact of change on the level of job satisfaction of community health nurses. The purpose of this study was to provide a description of the present level of job satisfaction and role conflict of community health nurses.

Background to the Problem

The prominence of the community health nurse in the role of health promotion has increased since recent documents proposed primary health care (PHC) as the base for all health programs and infrastructure (Epp, 1986; World Health Organization (WHO), 1978; WHO, Health & Welfare Canada & Canadian Public Health Association, 1986). Primary health care is defined as "the process of enabling people to increase control over, and to improve their health" (WHO et al.,
Health promotion is one of the mechanisms used to implement PHC (Labonte, 1988). The promotion of PHC as a role for nursing was incorporated into the Registered Nurses Association of British Columbia (RNABC) position statement and program, *New Directions in Health Care* (RNABC, 1983). The RNABC maintains that PHC can be delivered through community health units.

Within community health units in British Columbia, nursing services are organized into four programs: Preventive Services, Community Home Nursing Care, Long Term Care (LTC), and Community Mental Health. One service presently provided in Preventive Services is health promotion (Haluschak, 1991; Mills & Ready, 1988; Ministry of Health, 1990) and these activities are provided by community health nurses. The RNABC, as a result of the 1992 yearly census, identified 715 non-supervisory community health nurses practicing in British Columbia, the vast majority of whom are in Preventive Services (Claire Kermacks, personal communication, May 20, 1992).

Changes in the role of the CHN, as a result of the RNABC's position statement, have already been initiated by the City of Vancouver and the North Shore Health Departments (Dale Walker, personal communication, Sept. 19, 1991). In addition to the RNABC position statement and program, the British Columbia Royal Commission on Health Care and Costs (Province of British Columbia, 1991) indicated that it was time to place increased emphasis on health promotion. With increasing support for the health promotion component of PHC,
the role of the community health nurse (CHN) is expected to continue to expand to include more PHC activities.

However, the Community Health Nurse Practice Group of the RNABC has identified a decrease in the level of job satisfaction among its membership as a result of other role changes such as the loss of prenatal teaching (Community Health Nurse Interest Group, 1988). Findings of three studies support this decrease in job satisfaction among CHNs (Koerner, 1981; Lucas, McCreight, Watkins, & Long, 1988; Riordan, 1991).

Due to the anticipated implementation of the expanded role to place a greater emphasis on health promotion, there is potential for a further decrease in job satisfaction among CHNs (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). When CHNs assume this expanded role, the resulting role conflict and role ambiguity can lead to role stress and role strain, resulting in decreased job satisfaction (Hardy & Conway, 1988; Ward, 1986). Decreased job satisfaction may lead to increased personnel turnover (Kahn et al., 1964).

Researchers have found a correlation between a decrease in job satisfaction among acute care hospital nurses and increased employee turnover (Hinshaw & Atwood, 1984; Huey & Hartley, 1988; Price & Mueller, 1981; Seybolt, 1986; Seybolt, Pavett, & Walker, 1978; Story, 1981; Walker, 1990, Wandelt, Pierce, & Widdowson, 1981; Alexander, Weisman, & Chase, 1982). Studies of CHNs have also identified one of the negative consequences of low job satisfaction as increased employee turnover (Lucas et al., 1988; Riordan, 1991). Employee
turnover has a significant negative impact on the health care system due to costs of replacing staff and reduced quality of client care (Hinshaw, Scofield, & Atwood, 1981; Story, 1981). Although research on job satisfaction of acute care hospital nurses and CHNs has linked decreased job satisfaction with increased turnover rates, in British Columbia the turnover rate for CHNs is reported to be low (Vicki Anderson, personal communication, Oct. 19, 1991).

In conclusion, with an increased emphasis on health promotion, the role of the community health nurse will expand. Although change in the role through the loss of prenatal classes has been linked to a decrease in the level of job satisfaction, the present level of job satisfaction of CHN’s in British Columbia has not been identified. Studies on acute care hospital nurses have found that a decrease in job satisfaction has had a negative impact on health care economics and client care. Since organizational role theory posits that the increased role stress which accompanies a change in role expectations can lead to a decreased level of job satisfaction, it is useful to determine present levels of job satisfaction and role conflict in the current CHN work role before the expanded role is fully implemented.

**Conceptual Framework**

The conceptual framework for this study was drawn from organizational role theory using the role episode model (Kahn et al., 1964) (Figure 1). The role episode model states that interactions within organizations occur within a "role set." The "role set" is made up of a focal person occupying a role or "office" in the organization and "role senders" who are the stakeholders of that role, both
Figure 1. Schematic adaption of Role Episode Model (Kahn et al., 1964).

salary, work schedule, balance of family and work, coworkers, interaction opportunities, professional opportunities, praise and recognition, control and responsibility

ROLE SENDER
role expectations

FOCAL PERSON (CHN)
role expectations
length of job tenure
education
experience
age

ROLE CONFLICT

DECREASED JOB SATISFACTION

Objective Environment
inside and outside the organization. This two-way interaction is influenced by organizational, individual, and interpersonal factors. Organizational factors include formal power structure, work flow, technology, and physical proximity of work. Individual differences include beliefs, values, experience, and expectations of work. Interpersonal factors include leadership ability and communication skills. The role sender’s expectations of the focal person’s role performance act as "role pressures." These role pressures and the role set make up the focal person’s objective environment, and the focal person responds to his or her perceptions of the objective environment. These perceptions act as "role forces" which influence role performance. It is the incongruity between the role pressures and the role forces that leads to role conflict. The intensity of the conflict is mediated by individual differences and interpersonal skills. If role conflict is unresolved it can lead to role stress, role strain, and a resulting decrease in job satisfaction.

The role of the CHN, as the focal person, is continually undergoing changes in role content and therefore assuming different relationships with the role senders. The role senders of the CHN’s objective environment include supervisors, colleagues, health unit personnel, clients, clients’ families, the general public, Ministry of Health personnel, physicians, teachers, volunteers, social workers, school counsellors, members of service organizations, RNABC staff, British Columbia Nurses’ Union staff, and personal family members. Two-way interactions between the CHN and these stakeholders are influenced by factors such as salary, work schedule, balance between family and work, coworkers,
interaction opportunities, professional opportunities, praise and recognition, and control and responsibility.

The expectations of the role senders about the role are communicated or "sent" to the CHN in an attempt to influence her/his behaviour. The CHN responds to these role pressures by matching them to her/his own role expectations. These role expectations are influenced by the CHN's beliefs, values, and attitudes. The latter are modified by length of job tenure, educational level, experience, and age. When the role expectations of the CHN are incongruent with her/his perceptions of the role expectations of the role senders, role conflict occurs.

The response of the CHN to this conflict is individual. If the CHN is constantly torn by conflicting demands, expectations that s/he does not think are part of the role, or a process that s/he does not want to become involved in, then the result can include role stress, role strain, and decreased job satisfaction.

The role episode model was used as the framework for analysis in this study. This model provided a description of the relationships between job satisfaction, the dependent variable, and the independent variables of role conflict, age, length of job tenure, educational background, and experience in nursing.

Problem Statement

Although three studies reported on the level of job satisfaction among CHNs, no studies were identified that described the relationship between job satisfaction and role conflict. In B.C., decreased job satisfaction among CHNs has been identified; however, rates of personnel turnover are low. This is incongruent with
findings reported in the literature about acute care hospital nurses and CHNs in the
U.S. where decreased job satisfaction is associated with increased turnover. There
is, therefore, a need to identify factors influencing job satisfaction in the present
role of CHNs as a foundation to later evaluate the impact of the change due to the
expanded role in health promotion.

Purpose

The purpose of this study was to assess the level of job satisfaction and role
conflict of CHNs in British Columbia and to examine the relationship between these
two constructs and selected demographic characteristics.

Research Questions

The study was undertaken to answer the following research questions:

1. What is the level of job satisfaction in the work role of CHNs in British
   Columbia?

2. What is the level of role conflict in the work role of CHNs in British
   Columbia?

3. What are the relationships among the variables, job satisfaction and
   role conflict, and the demographic characteristics of age, length of job
   tenure, educational background, and experience in nursing among
   CHNs in British Columbia?
Definition of Terms

The following terms are used in this study:

1. Community Health Nurse (CHN): a nurse who engages in primary health care in a community setting full-time or part-time emphasizing health promotion and maintenance, illness and injury prevention, and health protection in partnership with the community, the family and the individual (Canadian Public Health Association, 1990). Operationally, a nurse who was identified as working in a community health agency with a minimum educational preparation of a public health certificate or baccalaureate degree on the 1992 registration form of the RNABC excluding gerontological, Home Care, LTC, and supervisors.

2. Job Satisfaction: "a positive or pleasurable emotional state resulting from the appraisal of one’s job" (Locke, 1976, p. 1300) as measured by the McCloskey/Mueller Satisfaction Scale (MMSS) (Mueller and McCloskey, 1990) (Appendix A).

3. Role Conflict: "dimensions of congruency-incongruency or compatibility-incompatibility in the requirements of the role, where congruency or compatibility is judged relative to a set of standards or conditions which impinge upon role performance" (Rizzo, House, & Lirtzman, 1970, p. 155) as measured by Role Questionnaire (Abridged Version) (Rizzo et al., 1970) (Appendix B).
4. Demographic Characteristics: vital statistics of the CHN population which are educational background, length of job tenure, age, and experience in nursing as measured by Nurse Demographics Questionnaire (Appendix C).

Assumptions

Six assumptions were fundamental to the approach taken in this study.

These were:

1. That part- and full-time CHNs experience the same level of role conflict.

2. That the eight subscales on the McCloskey/Mueller Satisfaction Scale represent all elements of the work situation that influence the job satisfaction of CHNs employed in the province of B.C.

3. That the CHNs will interpret the questionnaire items with common meaning.

4. That the CHNs will provide answers that they believe are true for them.

5. That the nurses who return the questionnaires identifying themselves as CHNs meet the theoretical definition of CHNs used in the study.

Limitations

The generalizability of the findings of the study is limited by the following factors that were not assessed: CHNs personal beliefs, values and attitudes about work; objective role conflict of CHNs; different role expectations between the Provincial Health Departments, the Lower Mainland Health Departments of Vancouver, North Shore, Richmond, and Burnaby; and, the fact that implementation of the expanded role of CHNs has already begun in the City of
Vancouver and the North Shore Health Departments. In addition, the study was restricted to CHNs in British Columbia.

Significance

The empirical significance results from the knowledge that is gained concerning the relationships between job satisfaction, role conflict, and selected demographic characteristics of CHNs. This study contributes to this knowledge base by providing a perspective on CHNs related specifically to the Canadian experience. The practical significance is that the data provide information concerning factors that influence job satisfaction in the present role. CHNs can use these findings to identify those components of their jobs that are lacking but needed. With increased awareness of the sources of job satisfaction or dissatisfaction and role conflict, CHNs have data to substantiate job needs to their employers. This increased awareness and education of employers could be the first steps in creating a job climate that fosters role harmony and job satisfaction. This could also benefit nurse managers in preparing the design for the implementation plan for the expanded role. The design would attempt to maintain sources of role harmony and job satisfaction, foster development of job needs, and reduce forces that were leading to role conflict so as to minimize the effect of role stress on the level of job satisfaction of CHNs presently in the role. Therefore, the risk of negative effects such as reduced job performance, turnover, absenteeism, and burnout can be minimized.
A review of the general and nursing literature is presented in order to establish the foundation for this study on the level of job satisfaction and role conflict among CHNs. The literature review is divided into three sections. The first section is a summary of what is known about the construct of job satisfaction, the methods used to measure it, and the research pertinent to community health nursing. The second section is a summary of what is known about the construct of role conflict, the methods to measure it, and the research pertinent to nursing. Finally, the third section is a summary of what is known about the relationship between the demographic characteristics of age, length of job tenure, educational background, and experience, and job satisfaction and role conflict.

Job Satisfaction

Definition of the Construct

The construct of job satisfaction has been the subject of considerable study since the 1930's. However, consensus on the essential attributes and their relationships has not been reached. Beer (1964), defined job satisfaction as the "attitude of workers toward the company, their job, their fellow workers, and other psychological objects in the work environment" (p.6). More recently, Locke (1976) defined job satisfaction as "a positive or pleasurable emotional state resulting from
the appraisal of one’s job” (p. 1300). The first definition views job satisfaction as an attitude of a group, while the second considers job satisfaction as a psychological appraisal of one individual. These two definitions illustrate a problem identified by Caroll (1973). In a comprehensive review of the research on job satisfaction, Caroll found a lack of agreement on the conceptual definition of job satisfaction. Job satisfaction could be conceived in terms of fulfilment, equity, desires, or values. The varying conceptualizations of job satisfaction made it difficult to compare the results of the different studies.

Theories

The lack of consensus on what is meant by job satisfaction is further complicated by the multiple analytical frameworks that exist. These frameworks represent three major approaches and have been based on various psychological and sociological theories which have been applied to management science. The first approach, referred to as content theories (Campbell, Dunnett, Lawler, & Weick, 1970) or universalistic predictions (Dewar & Werbel, 1979), identifies certain facets that influence job satisfaction such as the fulfilment of needs or motivators. These theories compare what the individual perceives that s/he has and what the individual wants. A small discrepancy between has and wants is associated with satisfaction and a large discrepancy is associated with dissatisfaction. Two content theories dominate the literature, need hierarchy theory (Maslow, 1954) and dual factor theory (Herzberg, Mauser, & Snyderman, 1959). Major criticisms of these theories are that they do not specify how certain
variables determine job satisfaction, and that they lack a comprehensive explanation linking motivation (Cope, 1979).

Attempts have been made to deal with these criticisms in the second approach. This approach, referred to as process theories (Campbell et al., 1970) or contingency predictions (Dewar & Werbel, 1979), relates to work motivation and specifies how certain variables (i.e., needs/wants/goals, expectations, and values) describe or predict job satisfaction. Two process theories are evident in the literature, expectancy theory (Vroom, 1964) and equity theory (Adam, 1965). Expectancy theory holds that performance in the work role results from three elements: strength of desire for the outcome, the probability that the outcome will come after performance, and the degree of certainty that effort will lead to performance. Job satisfaction results from attainment of a desired outcome, and dissatisfaction occurs when the outcome is not desired or obtained. In contrast, equity theory posits that an individual rates the work role by comparing it to that of another individual. The level of satisfaction in the work role is determined by the perceived goodness of fit between the individual’s outcomes and inputs, and those of the reference individual. These process theories have also been subject to criticism (Cope, 1979). Expectancy theory has been criticized for predicting what behaviour is probable rather than why it should occur. Equity theory has been criticized for a lack of explanation of both how the reference person is selected and why there are individual differences in what is valued.
Despite criticisms of content and process theories, Dewar and Werbal (1979), in comparing universalistic and contingency predictions of job satisfaction, indicated that both were predictors of job satisfaction. A third approach to job satisfaction has developed from a synthesis of the first and second approaches. This approach recognizes individual differences and views the previous approaches as different aspects rather than alternate explanations of job satisfaction (Cope, 1979). The approach could be termed a person-role fit in which job satisfaction results from the fit between the individual’s attributes and the characteristics of the work role (Cope, 1979; French, 1980; Hale, 1986). The most prevalent person-role fit theory in the literature is the job characteristics model (Hackman & Oldham, 1975). This model specifies that five core job dimensions arouse three critical psychological states which result in a variety of personal and work outcomes. Three elements, known as moderators, act to link the individual attributes with the core job dimensions and the outcomes. Job satisfaction results from the goodness of fit between the individual attributes and the core job dimensions and outcomes. The model has been criticized for its lack of adequate explanation for some of the variables (Hackman & Oldham, 1980). This included a lack of independence of the job characteristics, a lack of clear definition for feedback, and a weaker link between the job characteristics and psychological states than specified.

The predominant theories in the nursing literature are need hierarchy (Maslow, 1954) and dual factor (Herzberg et al., 1959). The predominant theories
in the non-nursing literature are equity (Adam, 1965) and expectancy (Vroom, 1964). There has been limited research in nursing using the job characteristics model.

In conclusion, three conceptual approaches to job satisfaction have been reviewed, content theories, process theories, and person-role fit theories. Difficulties have been encountered with all three approaches, so that no one approach is considered the best way to conceptualize job satisfaction. However, the third approach attempts to deal with the conceptual difficulties of the other two by matching individual differences to the work role. **Attributes of the Job**

Locke (1976), in a comprehensive review of the literature, suggested that, due to the complex nature of the interrelationships of job factors, assessment of job satisfaction can best be approached in terms of the attributes of the role. However, there is no agreement on which attributes should be studied. Job attributes from job satisfaction research include type of work, pay, promotions, recognition, benefits, working conditions, supervision, co-workers, and company and management (Locke, 1976). Locke (1976) indicated that job satisfaction resulted from challenging work which was congruent with such things as capabilities, personal interest in the job, and rewards for job performance; personal aspirations and working conditions; physical needs and accomplishment of the task; and high self-esteem. Other attempts have been made to identify attributes of job satisfaction (Caroll, 1973). These were demographic characteristics (age, sex, marital status, tenure, and education), organizational characteristics (size,
salary, and structure), and individual-related variables (identification with management and job involvement, job level, use of skills, and psychological challenge).

The attributes reported in the literature appear to be derived from the method used to collect the data for the study. Clarke, Beddome, and Whyte (1990), in a Delphi technique study to identify issues important in influencing the future of community health nursing in British Columbia, identified 10 role attributes contributing to job satisfaction. These individual-related variables included accomplishment of positive outcomes, opportunities for professional development, input to decision-making, recognition, relationships, challenged on the job, enjoyment of work, autonomy, versatility, and financial rewards. In contrast, more client-centred variables were reported in a study on community psychiatric nurses where the participants answered two open-ended questions identifying satisfiers and dissatisfiers with the job (Parahoo, 1991). The participants identified 30 factors that contributed to their job satisfaction and 36 that contributed to their dissatisfaction. The results reported only the five most frequently identified factors. The factors that contributed to job satisfaction were independent practice, interacting with the primary health care team, seeing clients improve, one-to-one nursing, and preventing admission to hospital. The factors that contributed to job dissatisfaction were clerical duties, lack of resources, heavy case load, lack of community facilities, and communication breakdown with general practitioners.
Other studies that have compared two different groups of nurses reported different findings about which attributes contribute to job satisfaction and dissatisfaction. A study comparing the job satisfaction of occupational health nurses (OPH) to acute care hospital nurses using the Minnesota Satisfaction Questionnaire found that compensation, creativity, and independence led to job satisfaction for OPHs whereas advancement, authority, coworkers, responsibility, security, and technical supervision led to satisfaction for acute care hospital nurses (Conrad, Conrad, & Parker, 1985). The findings indicated that company policies and practices, technical supervision, and recognition led to decreased job satisfaction for OPHs. Both groups indicated a lack of satisfaction with advancement opportunities. The differences between the two groups were thought to be largely because the OPHs worked alone. Another study, comparing hospital-based RNs and home health care RNs, using the Revised Munson and Heda Satisfaction Instrument, found that opportunities to use their skills, participate in important and worthwhile activities, to direct others connected with their jobs, to share in the determination of methods and procedures, and to share in the setting of organizational goals led to job satisfaction for home health care RNs (Curreri, Gilley, Faulk, & Swansburg, 1985).

In conclusion, attributes of job satisfaction identified from the literature are extensive. Attributes identified from the studies on community health nurses are inconclusive due to different methods used by individual researchers. However, some attributes are more commonly associated with job satisfaction than others.
These include: job importance, interpersonal relations (coworkers, social interaction), and achievement (accomplishment). One attribute commonly associated with a lack of satisfaction is pay (salary/benefits). Generally, there is a lack of agreement on what attributes of the work role should be studied to determine job satisfaction. These attributes include demographic, organizational, and individual characteristics. Studies of different nursing groups indicate that the attributes contributing to job satisfaction and dissatisfaction are different for each group.

**Measurement**

As with the conceptual and theoretical definitions of the construct, measurement of job satisfaction also is a problem. Rating scales are the most prevalent method used. Price and Mueller (1986), in reviewing the measurement of job satisfaction using rating scales, indicated that there are two types of measurement. Measurement involves scales that use either a global score, as with the scale developed by Brayfield and Rothe (1951), or a multidimensional score as used in measurement with the McCloskey/Mueller Satisfaction Scale (MMSS) (Mueller & McCloskey, 1990). The global score measures general overall satisfaction with the job, whereas a multidimensional score measures satisfaction with various aspects of the job.

These self-report rating scales are a direct form of measurement. The problem identified by Locke (1976) with these types of scales is that they do not account for individual differences in values which may lead to scoring errors and
therefore, are not a true evaluation of some individuals' level of satisfaction. In addition, Locke states that some rating scales include both descriptive and evaluative items. He cautions that the use of these two types of items in the same scale may show "different relationships with other variables" (p. 1335). He indicates that these measures make two invalid assumptions which are that the respondents have "perfect self-insight" and that all respondents interpret the statement in the same way.

Indirect measurement of job satisfaction focuses on the theorized cause and assumes the outcomes to be due to job satisfaction or dissatisfaction (Price & Mueller, 1986). An example of this type of measurement is the Cornell Job Descriptive Index (JDI) (Smith, Kendal, & Hulin, 1969). Gruneberg (1979) indicated that the JDI is the best-developed instrument for measuring job satisfaction. Common outcomes of decreased job satisfaction identified from the acute care hospital nursing literature are: burnout (Dolan, 1987); employee turnover (Hinshaw & Atwood, 1983; Huey & Hartley, 1988; Price & Mueller, 1981; Seybolt, 1986; Seybolt et al., 1978; Story, 1981; Walker, 1990; Wandelt et al., 1981; Weisman, 1981); absenteeism (Gupta & Beehr, 1979); and a decreased level of job performance (Packard & Motowidlo, 1987). However, Wanous and Lawler (1972) questioned whether the postulated cause was the reason for decreased job satisfaction or whether it was due to measuring error. They found that, for the same sample group, there were significant correlations between job satisfaction and absenteeism with three of the nine instruments
studied. They concluded that a positive job satisfaction-absenteeism relationship was dependent on the instrument used rather than any relationship between the two variables.

Wanous and Lawler (1972) in their multitrait-multimethod analysis of nine job satisfaction rating scales, found that there was a lack of agreement on the operational definition of job satisfaction. In addition, they found that the results from the nine scales could not be compared with one another. Grunberg (1979) indicated another problem with rating scales was that they do not take into consideration peculiarities of different situations.

In response to the lack of appropriate rating scales that incorporate the peculiarities of the role of the nurse, a number of rating scales have been developed to measure nurse satisfaction. For these scales, nurse satisfaction is equated with job satisfaction. Three instruments identified in the hospital nursing literature were the updated index of work satisfaction (IWS) (Slavitt & Piedmont, 1986), the nursing job satisfaction scale (NJSS) (Atwood, Hinshaw, Gerber, & Erickson, 1987), and the McClosky/Mueller Satisfaction Scale (MMSS) (Mueller & McCloskey, 1990).

The IWS has been criticized as requiring the collection of two types of information and as having complicated scoring procedures thus adding to the time and cost for analysis (Mueller & McCloskey, 1990). The NJSS was adapted from the Brayfield and Rothe scale (1951) and is used to derive a global score of job satisfaction. The MMSS was designed for use with acute care hospital nurses and
is found to have strong technical quality since reliability and validity have been established.

Another method of measuring job satisfaction is the critical incident technique. Herzberg et al. (1959) interviewed employees in a qualitative study about how attributes of the job led to satisfaction or dissatisfaction. Locke (1976) indicates that the advantage of this method is that "the meaning of the responses can be determined; contradictions can be explained or corrected; individuals with poor self-insight can be assessed more accurately; and misinterpretations of the items can be corrected" (p.1336). He also indicates that the disadvantages are threefold: difficulty maintaining objectivity, lengthy time to undertake the study and therefore, increased cost and lack of congruence between interviewers.

In summary, the rating scale is the most prevalent method of measuring job satisfaction. Rating scales measure job satisfaction as a global score or a multidimensional score. Since it has been suggested that job satisfaction be analyzed in terms of attributes of the role, the multidimensional score is more appropriate (Locke, 1976). In addition, job satisfaction is also measured directly or indirectly. There are problems with both of these approaches to measuring job satisfaction. Direct approaches such as self-report rating scales, make two invalid assumptions that influence the accuracy of the results if violated (Locke, 1976). Indirect approaches have been criticized because the relationship between the variable and job satisfaction has been found to be dependent on the instrument rather than on postulated cause. Three rating scales were identified that
incorporate the peculiarities of the role of nurses, one using a global score, one using a multidimensional score, and one using an indirect approach. One other method was identified, critical incident technique, which dealt with the weaknesses of the rating scales but was lengthy and thus more costly to use than rating scales, and had methodological limitations due to the use of interviewers.

Research Findings

Most studies of job satisfaction cited in the literature have been done with hospital staff nurses (Alexander et al., 1982; Hinshaw & Atwood, 1984; Huey & Hartley, 1988; Price & Mueller, 1981; Seybolt, 1986; Seybolt et al., 1978; Story, 1981; Walker, 1990, Wandelt et al., 1981). These studies have been consistent in finding that there are low levels of job satisfaction among acute care hospital nurses. The few studies which have been done on nurses in the community which include community psychiatric nurses (Parahoo, 1991), home health care nurses (Curreri, Gilley, Faulk, & Swansburg, 1985) and occupational health nurses (Conrad, Conrad, & Parker, 1985), have also found decreased job satisfaction.

Studies in the United States on CHNs have reported similar findings of decreased job satisfaction (Koerner, 1981; Lucas et al., 1988; Riordan, 1991; Stember, Ferguson, Conway, & Yingling, 1978). Koerner (1981), using a small sample of 32 CHNs, examined the relationships between job performance, age, work experience, educational preparation, state board licensure examination scores, job satisfaction, and leader behaviour using the JDI. Job satisfaction was positively correlated with surgery and obstetric nursing licensure examination
scores. Comparing the job satisfaction scores with established norms for female plant workers, the researcher found that nurses were less satisfied with pay and promotions, more satisfied with work and co-workers, and equally satisfied with supervisors. The study also reported a positive relationship between leadership behaviour and job satisfaction but did not specify the type of leadership behaviour. Job performance correlated negatively with job satisfaction.

Lucas et al. (1988) assessed the level of job satisfaction of 741 public health nurses using the Stember et al. (1978) questionnaire. The results indicated that high levels of job satisfaction were associated with nurses who completed the job at work rather than taking work home, had master’s educational preparation, were nurse supervisors, and worked in tuberculosis or child health programs. The components of the job with which they were most satisfied were job importance, interpersonal relations, and achievement. The components with which they were least satisfied were job mechanics, recognition, and salary/benefits.

Another study examined predictors of job satisfaction using the staff satisfaction scale on 104 community health, school health, and home health nurses (Riordan, 1991). Prestige was the strongest predictor of job satisfaction. Moderate predictors of job satisfaction were autonomy, social interaction, and organizational requirements, but pay and task were not significantly related.

The oldest study reported on the level of job satisfaction using an instrument developed by the researchers (Stember et al., 1978). Of the 221 nursing and non-nursing staff at a metropolitan health agency, professional nursing groups were
reported to be more satisfied with the job than were non-nursing groups. Field nurses were more satisfied with job importance and interpersonal relations and least satisfied with organizational policies, communication, job mechanics, and recognition. This ranking of the job dimensions was similar to that reported by Lucas et al. (1988) who used the same instrument. Nursing and non-nursing administrative staff were reported to be more satisfied than were nursing and non-nursing non-administrative staff. However, not all the data were separated for nursing and non-nursing groups.

Other studies reported findings on job satisfaction of community health nurses. Godfrey (1978), in a nationwide survey of 17,000 Nursing '78 subscribers, reported that nurses in schools and occupational health nurses were more satisfied with their work than hospital nurses, but no empirical data were provided (school nursing is part of the role of the CHN in British Columbia). In contrast, a study by Geiger and Davit (1982) reported that public health nurses were less satisfied with their jobs than were acute care hospital nurses. The results indicated that public health nurses were more satisfied with administrative foresight and planning, the agency's effort to provide information, and the desirability and appeal of their jobs. Hospital nurses were more satisfied with fewer restrictions to professional advancement and opportunities for creativity and self-expression at work. Another study surveyed 1051 RN subscribers including non-hospital nurses 28.6% of whom were community and school nurses (Donovan, 1980). Donovan reported that non-hospital staff nurses switched
employers less often and remained with employers for longer periods of time than did hospital staff. Specific data for community and school health nurses were not cited.

In conclusion, few studies have been done on the level of job satisfaction of CHNs. Of the seven studies reviewed, differences in the methods used and the reporting of the results made it difficult to understand job satisfaction in community health nursing. Two studies using the same instrument to measure job satisfaction reported similar conclusions about the job components with which CHNs were satisfied but differences in sample sizes, sampling methods, and research designs, made it difficult to compare the results (Stember et al., 1978; Riordan, 1991). Although the components of the job that nurses were satisfied or dissatisfied with vary among the studies, all support the conclusion, reported in studies on other nursing groups, that there is a decreased level of job satisfaction among nurses.

**Role Conflict**

**Definition of the Construct**

In contrast to job satisfaction, there is general agreement in the literature on the concept of role conflict (Getzels & Guba, 1954; Gorman, 1971; Gross, Mason & McEachran, 1958; Kahn et al., 1964; Rizzo et al., 1970). Kahn et al. (1964) popularized the term in organizational literature defining it as "sent role conflict" in that the conflict arises in the work environment when role pressures give rise to role forces within the individual in the role. Rizzo et al. (1970), in developing a
scale for measurement of the concept, defined it as "dimensions of congruency-incongruency or compatibility-incompatibility in the requirements of the role, where congruency or compatibility is judged relative to a set of standards or conditions which impinge upon role performance" (p. 155). Gorman (1971) defines role conflict as "dissensus arising from the perceptual differences in interpreting required normative behavior." These three definitions identify the attributes of the construct as conflict, expectations of behavior, external pressure, and internal pressure.

**Measurement**

Measurement of role conflict is usually done in conjunction with role ambiguity. Throughout the literature, measurement of the two constructs is reported in two different ways: as a combined role conflict-role ambiguity score (Eisenhauer, 1984) or as a separate score for role conflict and role ambiguity (Jackson, 1983; Posner & Randolph, 1980). Jackson and Schuler (1985), in a meta-analysis of over 200 studies using the Role Questionnaire (Rizzo et al., 1970), the most common instrument found in the nursing and non-nursing literature, suggested that the two constructs be measured separately.

King and King (1990) indicated that all role conflict-role ambiguity measures lack content validity. The measures reviewed were developed by Kahn et al. (1964), Rizzo et al. (1970), modified scales using the abridged Rizzo et al. (1970) scale (Kopelman, Greenhaus, & Connolly, 1983), and abridged versions of the original Rizzo et al. (1970) scale (Tosi & Tosi, 1970). They found that all the
measurements lacked convergent and discriminant validity, and did not reflect the hypothesized relationships put forth in the role episode model. They suggested that some of the inconsistencies in research findings were due to these measurement deficiencies. In contrast, Kelloway and Barling (1990) reported that the Role Questionnaire exhibited content validity. Despite the inconsistency in findings, the researchers concurred that the negatively worded items on the questionnaire needed to be mixed with positively worded items to reduce unintended covariance. Therefore, the questionnaire needed to be refined.

In summary, role conflict is usually measured together with role ambiguity. Although the two constructs can be measured as one score or as two separate scores, measuring each construct separately is recommended. The most frequently used instrument in studies on role conflict is the Role Questionnaire (Rizzo et al., 1970). Due to problems that could result from wording, this instrument needs to be refined.

Research Findings

head nurse role, reported that despite a difference in what physicians and head
nurses expected of the role, the nurses did not experience significant role conflict.

The literature revealed contradictory evidence of the relationship between
role conflict and job satisfaction. Rizzo et al. (1970) reported that role conflict had
a positive correlation with job satisfaction. Tosi and Tosi (1970) found that role
conflict was negatively correlated with job satisfaction, and Hammer and Tosi
(1974) found no relationship between the two constructs.

Studies using the Role Questionnaire with acute care hospital nurses report
consistent findings that an inverse relationship exists between role conflict and job
satisfaction (Bedian et al., 1981; Brief et al., 1979; Jackson, 1983; Pilkington &
Wood, 1986; Posner & Randolph, 1980; Randolph & Posner, 1981; Schuler et al.,
comparing nursing faculty with joint appointments and nursing faculty without joint
appointments, found that role conflict was significantly correlated with decreased
job satisfaction among joint appointees. Fain (1987), in a study of role conflict
and job satisfaction among nurse educators, reported no significant findings.
Bunsey, Defazio, Pierce, and Jones (1991) reported that intersender conflict was
related to lower job satisfaction among nurse managers where physicians and
subordinates wanted the manager to give more time to direct patient care.

Five studies were identified that did not use the Role Questionnaire but
whose frameworks of analysis were comparable to person-role conflict. Davis
(1974), in a study comparing the ratings of nurses with physicians, patients and
other hospital staff on the functioning of a psychiatric unit, found that intrarole conflict was not reflected in job satisfaction. The study was limited by the lack of established reliability and validity of the instrument. Kramer and Schmalenberg (1979), in a study of nursing graduates in their first job, found that new graduates' expectations were incongruent with the actual work situation and this resulted in lowered job satisfaction. Cairns and Cragg (1987), in a qualitative study on the difference between expectations and realities of baccalaureate nurses in the hospital, found that advanced educational preparation was underutilized and that the fit between expectations and the work situation was deficient, leading to disillusionment and withdrawal from the job. This study used a convenience sample from one hospital, therefore generalizability is limited. In another study, Oechsle and Landry (1987) compared the congruity of expectations and present employment of two groups of hospital nurses with different lengths of tenure and reported that incongruity was a factor in job dissatisfaction. Wandelt et al. (1981), in a study comparing RN's who were working in hospitals and who were not working in nursing, found that when expectations about job conditions were not met the nurses became dissatisfied with their jobs and left the profession.

In addition, research has also reported that the two constructs are linked to different variables (Fisher & Gitelson, 1983). Role ambiguity has been linked to job turnover, but role conflict has not (Lyons, 1971; Rizzo, et al., 1970).

In summary, investigators using the Role Questionnaire have reported consistent findings indicating that hospital nurses experience role conflict. Only
one study was identified that did not support these findings. The variations in the findings regarding the relationship between role conflict and job satisfaction found with non-nurse samples was not supported in studies on acute care hospital nurses. Consistent evidence from acute care hospital nurse studies indicated that decreased job satisfaction was related to increased role conflict.

Findings of four studies in which the Role Questionnaire was not used supported the findings from studies on acute care hospital nurses. Researchers reported that, when there was a lack of fit between expectations of the job and the actual job situation, decreased job satisfaction resulted. Only one study, not utilizing the Role Questionnaire, found contradictory evidence that the goodness of fit did not affect the level of job satisfaction.

**Demographic Characteristics**

The demographic characteristics used in studies of job satisfaction are varied and their relationship with job satisfaction remains to be established. Demographic characteristics found in the literature have included educational background, organizational tenure, length of job tenure, age, years of experience, gender, and socio-economic status.

**Research Findings**

There is variation in the findings regarding variables of age, length of tenure, educational preparation, and years of experience of hospital nurses and job satisfaction. Simpson (1985) found a slightly positive relationship between length of experience and job satisfaction and no relationship with level of education.
Seybolt (1986), in a study using the Job Diagnostic Survey, found relationships between different job variables and length of experience and tenure. Using the study's tenure scale, nurses with tenure of 3 to 6 months reported feedback as the critical factor whereas nurses with tenure of 3 to 6 years reported autonomy and role clarity as the critical factors. Nurses with 3 to 6 years tenure reported task significance and those with over 6 years reported supervisory feedback as being significant.

Only one study was found that compared age, educational level and tenure with job satisfaction of CHNs (Lucas et al., 1988). They found that nurses who had master's degrees experienced greater job satisfaction.

Literature on demographic variables and role conflict also shows variation in the findings. Brief et al. (1979), in a study of general duty hospital nurses, reported no significant relationship between different educational levels and role conflict on the job. They also found that job tenure does not mitigate the impact of the level of education on role conflict. However, Schuler et al. (1977) found a negative correlation between education and role conflict. Fain (1987), in a study of nurse educators found no significant relationship between role conflict and either experience or education. Eisenhauer (1984), in a study of nursing faculty, found that role conflict decreased with increased age.

In summary, the relationship between demographic variables such as age, length of job tenure, educational preparation, and years of experience and job satisfaction has yet to be established. The findings of the studies were
inconclusive. The findings of the studies on the relationships between these demographic variables and role conflict were contradictory. Only one study reported findings on CHNs where master’s level educational preparation was related to job satisfaction.

Summary

In this chapter, general and nursing literature relevant to the variables of job satisfaction, role conflict, and demographic characteristics were examined. Existing information regarding job satisfaction of community health nurses is both limited and conflicting. Studies on job satisfaction of CHNs supported the conclusion that CHNs are dissatisfied with their work role. However, comparison of the studies to determine which attributes of the work role result in satisfaction or dissatisfaction was difficult due to differences in the methods used by individual researchers.

Studies comparing job satisfaction of acute care hospital nurses and other nursing groups, including CHNs, indicate a difference in attributes contributing to satisfaction and dissatisfaction between groups. It has been suggested that due to the complex nature of the interrelationships of job factors, assessment of job satisfaction can best be approached in terms of the attributes of the work role.

Studies on job satisfaction of nurses have largely been based on need hierarchy and dual factor theories. In the non-nursing literature equity and expectancy theories predominate. However, current thinking on job satisfaction combines different aspects of these theories into person-role fit theories.
Therefore, an analytical framework for this study incorporating the current thinking on the construct of job satisfaction is appropriate.

In nursing studies, job satisfaction has often been linked to role conflict and ambiguity using the role episode model. This model is a person-role fit theory which recognizes the influence of individual differences on the fit of the CHN with the work role. Research has indicated that role conflict and role ambiguity are linked to different variables. While role ambiguity has been linked with turnover, role conflict has not. As rates of CHNs turnover in British Columbia are low, the study of job satisfaction can best be approached through studying its relationship with role conflict.

The majority of research on role conflict and job satisfaction has been done from the perspective of the acute care hospital nurses or nurse educators. Studies on acute care hospital nurses consistently reported lower levels of job satisfaction related to higher levels of role conflict. In contrast, inconsistent findings were reported about the relationship between role conflict and job satisfaction among nurse educators. While these studies have contributed to the knowledge about the relationship between job satisfaction and role conflict in nursing, the contradictory findings among different nursing groups suggests that the role episode model does not fully explain the relationship for all nursing groups. Studies identifying the relationship between role conflict and job satisfaction in community health nursing were not found.
A variety of methods including rating scales and critical incident technique have been used to measure job satisfaction. When time and cost were factors in a study, it was recommended that a rating scale be used. It was also suggested, due to the complex nature of the interrelationships of the job attributes, that a rating scale using a multidimensional score was most appropriate. Many different rating scales were found that measured job satisfaction. However, one rating scale (MMSS) accounted for the peculiarities of the role of nursing and attempted to minimize measurement limitations by using a direct approach with a multidimensional score. Therefore, the use of the instrument in this study is warranted.

In contrast, role conflict was frequently measured using one rating scale, the Role Questionnaire. Although other instruments exist, use of the same instrument in this study allows the results to be compared to results from studies on acute care hospital nurses and nurse educators.

Demographic variables such as age, length of job tenure, educational preparation, and experience in nursing have also been related to job satisfaction. However, information specific to the relationship between demographic variables and job satisfaction was limited and inconsistent. Existing information, in community health nursing, indicated that masters' preparation was related to job satisfaction. However, little was known about the relationship between the other demographic variables and job satisfaction among CHNs. These relationships need
to be assessed in this study to determine if they moderate the relationship between role conflict and job satisfaction.

Job satisfaction among acute care hospital nurses has been studied extensively due to organizational problems such as turnover, absenteeism, burnout, and reduced job performance. It is timely, therefore, to determine what factors influence job satisfaction in the present CHN work role so that the risk of the same problems resulting from role changes can be minimized. This study provides such a perspective.
CHAPTER THREE

METHODS

The research methods used in the study and specific procedures that were followed are described in this chapter. The first section presents the research design, the sample selection and criteria, method of sample recruitment, and the instruments used. The second section describes the data analysis procedures used, and the third outlines mechanisms used for the protection of human rights.

Research Design

This study used a descriptive correlational design with a representative sample of a single population of CHNs. It assessed the extent to which the independent variables (role conflict and selected demographic characteristics) related to the dependent variable (level of job satisfaction) (Woods & Catanzaro, 1988).

Sample Selection and Selection Criteria

A simple random sample was recruited through a mail-out survey to individuals randomly drawn from the 1992 Register of the RNABC. The criteria for sample selection were employment in a community health agency in a full- or part-time staff position and a minimum education requirement of a certificate in public health or a baccalaureate degree as reported on the 1992 registration form. These criteria excluded home care and long term care (LTC) nurses, and supervisors. The sample pool was approximately 715 nurses (Claire Kermacks, personal
communication, May 20, 1992). Using the 1992 RNABC registration form, it was not possible to separate out all CHNs who did not meet the criteria. Therefore, ineligible CHNs receiving the mail-out were requested not to fill out or return the instruments.

The desired sample size was 120 subjects, calculated using a formula of 20 subjects per variable (i.e., 6 variables multiplied by 20) (Tabachnick & Fidell, 1983). A previous mail-out study done by the RNABC reported a 46.7% return rate for questionnaires, therefore, the sample size was increased to 240 to account for this effect on the results (Clarke, Beddome, & Whyte, 1990).

**Subject Recruitment**

The subjects for the study were recruited by the RNABC, under the direction of the Director, Division of Regulatory Services. A letter outlining the purpose of the study and requesting participation and a postage paid return envelope were included with the instruments (Appendix D). Since the desired sample size was not achieved after three weeks, a follow-up postcard was mailed to the non-respondents to urge their participation.

**Instruments**

Three instruments were used in this study. The instrument used to measure job satisfaction was the McCloskey/Mueller Satisfaction Scale (Appendix A). Role conflict was measured by the Role Questionnaire (Abridged Version) (Rizzo, et al., 1970) (Appendix B), and the demographic characteristics were obtained with the Nurse Demographics Questionnaire (Appendix C).
The McClosky\Mueller Satisfaction Scale (MMSS)

The MMSS is made up of eight subscales with a total of 31 items. The subscales are: extrinsic rewards, scheduling, balance of family and work, co-workers, interaction opportunities, professional opportunities, praise and recognition, and control and responsibility. Responses are given on a five point Likert-type scale ranging from very satisfied to very dissatisfied. The resulting scores can range from 31 to 155 with higher scores indicating greater satisfaction.

Both reliability and validity of the instrument have been established (Mueller & McCloskey, 1990). Mueller and McCloskey state that reliability has been established for each of the eight subscales using Cronbach alphas and test-retest correlation coefficients. Cronbach alphas fall within acceptable limits with 0.52 for extrinsic rewards, 0.84 for scheduling, 0.57 for balance of family and work balance, 0.72 for interaction opportunities, 0.64 for professional opportunities, 0.80 for praise and recognition, and 0.80 for control and responsibility. Test-retest correlations between measurements taken at six months and twelve months on the job fell within acceptable limits and were largely consistent with the Cronbach alphas.

Both construct and criterion-related validity were established. Construct validity was assessed to determine if the subscales of the MMSS correlated with the subscales of task variety, autonomy, feedback, friendship opportunities, and task identity of the Job Characteristics Inventory (JCI), and with intent to stay on the job. The JCI subscales were moderately correlated for all expected
relationships with the subscales of the MMSS. Seven of the eight subscales of the MMSS produced significant correlations with the intent to stay; the exception was the balance of family and work subscale.

Criterion-related validity was established by correlating the eight subscales with the Brayfield-Rothe general job satisfaction scale and with the subscales of the Job Diagnostic Survey (JDS). Correlation of a global score of job satisfaction with the Brayfield-Rothe was 0.41 and with the JDS, 0.56. However, the authors caution using the instrument as a global measure when there is interest in the aspects of the job affecting satisfaction as the factor analysis demonstrated separate dimensions which would be hidden by a global score.

The three items of the scheduling subscale, "weekends off per month," "flexibility in scheduling your weekends off," and "compensation for working weekends" were deleted from the instrument for this study, as it was thought that the CHNs worked Monday to Friday only and these items would not apply. However, one respondent indicated that she was dissatisfied with her schedule as she worked on Saturdays. The omission of the 3 items was not expected to affect the reliability and validity of the instrument (personal communication, Joanne McCloskey, April 21, 1991).

The Role Questionnaire (Abridged Version)

This instrument consisted of the 8 items that measure role conflict from the original Abridged Role Questionnaire (Rizzo et al., 1970). The original instrument is a 14-item questionnaire measuring perceived levels of role conflict and role
ambiguity. The first six items represent role ambiguity and the last eight represent role conflict. Discriminant validity through factor and item analysis show that the two concepts emerged as separate dimensions, therefore the instrument can be used to measure the two constructs separately (Rizzo et al., 1970). A five point Likert-type scale is used for responses ranging from strongly disagree to strongly agree. Total scores can range from 8 to 40, higher scores indicating higher levels of role conflict.

Reliability has also been established. Internal consistency reliability estimates are 0.81 for role conflict (Rizzo et al., 1970). Reliabilities have been supported in a meta-analysis by Jackson and Schuler (1985).

**Nurse Demographics Questionnaire**

The third instrument was developed by the researcher to collect data relevant to four demographic variables: age, length of job tenure, educational background, and experience in nursing. The instrument was pretested for clarity through a review by the thesis committee.

**Data Analysis**

Data were analyzed using a computer software program, Number Cruncher Statistical System. The analysis proceeded in five steps. The first step was an assessment of each of the demographic variables using descriptive statistics including means, ranges, percentages, and frequencies. The second step was an assessment of the level of job satisfaction and of the level of role conflict using the descriptive statistics of means. Step three was an assessment of the magnitude
and direction of the relationships between the variables job satisfaction and role conflict using Pearson product moment correlations. Step four involved an assessment of the magnitude and direction of the relationships among the variables, job satisfaction, role conflict, and each demographic characteristic using Pearson product moment correlations. The final step was a multiple regression analysis to determine the contributions of the independent variables of role conflict, and demographic characteristics in explaining the variance in the dependent variable, job satisfaction (Tabachnick & Fidell, 1983). The level of significance was preset at alpha = .05 for all statistical tests.

**Procedures for the Protection of Human Rights**

The procedures for the protection of human rights proceeded in three stages. Firstly, the proposal received the approval of the University of British Columbia Behaviourial Sciences Screening Committee for Research and Other Studies Involving Human Subjects prior to data collection. Secondly, participants in this study were recruited from the register of the RNABC. Since the RNABC has a commitment to the membership to maintain anonymity of the members of the register, no names were known to the researcher. The RNABC identified the names and addresses of the randomized sample, mailed out the surveys, and received the returned mail. Thirdly, the letter that accompanied the surveys outlined all provisions for the protection of subjects’ rights (Appendix D). Finally, data were accessible only to members of the thesis committee and the statistical consultant.
Summary

This study used a descriptive correlational design with a simple random sample of CHNs to determine if there was a relationship among job satisfaction, and role conflict and selected demographic variables. Three instruments and a covering letter were mailed out under the direction of the RNABC to solicit participation in the study. Data from the respondents were analyzed in five stages including descriptive statistics, Pearson product moment correlations, and multiple regression analysis. Procedures were undertaken to ensure that the rights of the subjects were protected.
CHAPTER FOUR
FINDINGS AND DISCUSSION

The findings are presented and discussed in this chapter, which is divided into four sections. In the first section the demographic characteristics of the study sample are reported and examined, in the second and third sections the levels of job satisfaction and role conflict are described and discussed, and in the fourth section the magnitude and direction of the relationships among these variables are presented and addressed.

Description of the Sample

A total of 240 packets were mailed out by the RNABC to CHNs, identified through their 1992 RNABC registration information, working in a full- or part-time non-supervisory position in a community health agency and with a minimum educational requirement of a certificate in public health or a baccalaureate degree. Of the 138 (57.5%) responses received, fifteen did not meet the inclusion criteria and were excluded from the subsequent analysis. The study sample consisted of 123 (51.25% return) non-supervisory CHNs employed in Preventive Services in British Columbia (BC).

Demographic Characteristics

Characteristics of the CHNs were obtained from the Nurse Demographics Questionnaire. A profile of the respondents was created from the data (Tables 1 and 2).
The average age of the study sample was 41.21 years, with a range of 24 to 66 (Table 1). The proximity of the sample mean value and the median (41) indicates that the ages are symmetrically distributed among the respondents (Ott, 1988). Therefore, with a standard deviation of 8.60, the results indicate that the majority (approximately 68%) of CHNs were between the ages of 32 and 50, and approximately 95% of CHNs were between 24 and 58 years of age. Eight percent of the respondents were under the age of 30 (Table 2). Therefore, the CHNs in the study sample make up a work force largely in its middle years.

Table 1

<table>
<thead>
<tr>
<th>Demographic characteristics</th>
<th>Mean</th>
<th>Median</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>41.21</td>
<td>41</td>
<td>24-66</td>
</tr>
<tr>
<td>Job Tenure</td>
<td>7.69</td>
<td>5</td>
<td>.16-31</td>
</tr>
<tr>
<td>Experience</td>
<td>16.61</td>
<td>15</td>
<td>1-40</td>
</tr>
</tbody>
</table>
The median length of job tenure was 5 years, with a range of 2 months to 31 years (Table 1). In contrast to the age of the study sample, the difference between the mean value (7.69) and the median indicates that the distribution of years of job tenure among the respondents is skewed to the right (Ott, 1988). The mean value is influenced by very long periods of job tenure and, therefore, is distorted. In this case, the median more clearly indicates the central value of the sample group (Ott, 1988), that is, half of the CHNs have remained with their present employer for five years. These results are consistent with those found among BC's acute care hospital nurses where 51.6% have stayed with their employer 5 years or longer (Health Manpower Research Unit, 1988).

Length of experience since registration as an R.N. averaged 16.61 years. The range was 1 to 40 years (Table 1). Similar to the length of job tenure, the difference between mean and median values for years of experience indicates that the distribution is skewed to the right among the respondents. With this distortion, the median of 15 years is considered the central value for this study sample.

The age profile of the study sample was compared to age profiles for registered nurses in BC and hospital-employed nurses in Canada (Statistics Canada, 1991) (Table 2). The comparison shows that CHNs tended to be older, started their jobs later, and retired earlier than nurses employed in hospitals. The age profile of the study sample resembles that of the hospital nurses in Canada for ages 50 to 54 only. The greatest difference is with ages 45 to 49, where CHNs
Table 2

Percentages of Registered Nurses by Age Categories

<table>
<thead>
<tr>
<th>Age (n = 122)</th>
<th>Canada (hospital)</th>
<th>BC</th>
<th>Study sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 25</td>
<td>3.05</td>
<td>2.43</td>
<td>0.81</td>
</tr>
<tr>
<td>25-29</td>
<td>12.77</td>
<td>10.57</td>
<td>7.31</td>
</tr>
<tr>
<td>30-34</td>
<td>15.85</td>
<td>13.95</td>
<td>13.01</td>
</tr>
<tr>
<td>35-39</td>
<td>18.59</td>
<td>17.95</td>
<td>21.95</td>
</tr>
<tr>
<td>40-44</td>
<td>17.26</td>
<td>17.32</td>
<td>18.69</td>
</tr>
<tr>
<td>45-49</td>
<td>13.98</td>
<td>15.43</td>
<td>21.14</td>
</tr>
<tr>
<td>50-54</td>
<td>9.57</td>
<td>11.21</td>
<td>9.75</td>
</tr>
<tr>
<td>Above 54</td>
<td>8.80</td>
<td>11.02</td>
<td>6.50</td>
</tr>
</tbody>
</table>

outnumber hospital nurses by 7%. In contrast, comparing the study sample to BC registered nurses, there is a greater percentage of CHNs in the 30 to 49 age group but a lower percentage for ages below 29 and above 50.

An explanation for the finding that CHNs tend to be older and start their jobs later is the hiring criteria used by health departments. Historically, Preventive
Service CHNs required a minimum of two years hospital experience in addition to a one year post-basic public health certificate or a baccalaureate degree. Therefore, CHNs were typically 24 years of age or older at the time of hiring. There has been little turnover in the workforce of CHNs over the last ten years as the tendency has been to remain on the job during childbearing years. Thus, the hiring of new CHNs was largely limited to replacing those who moved or retired. Length of job tenure data combined with educational background data suggests that, when such a vacancy occurred, the trend has been to hire CHNs who have upgraded from a diploma to a baccalaureate degree in nursing. The majority of these individuals now fall in the 45 to 49 year age group.

One explanation for the apparent younger age of retirement of CHNs is that they have had longer lengths of job tenure and, thus, were eligible for full pension earlier. Those CHNs who have remained in the work force since the age of 24 would have been eligible for full pension at age 59 or could have taken their pension at age 55 with a penalty.

Of the 123 CHNs in the study sample, 78.86% reported that they held a baccalaureate degree in nursing with 43.90% receiving their basic preparation at the baccalaureate level and 32.52 % returning for the degree after obtaining a diploma in nursing (Table 3). The remaining 23 held public health certificates (18.7%), baccalaureate degrees in another field (2.4%), or master’s degrees (2.4%).
Table 3

**Educational Background of Community Health Nurses**  \[ N = 123 \]

<table>
<thead>
<tr>
<th>Education</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public health cert.</td>
<td>23</td>
<td>18.70</td>
</tr>
<tr>
<td>Baccalaureate-nursing</td>
<td>97</td>
<td>78.86</td>
</tr>
<tr>
<td>Basic</td>
<td>54</td>
<td>43.90</td>
</tr>
<tr>
<td>Post-R.N.</td>
<td>40</td>
<td>32.52</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>2.44</td>
</tr>
<tr>
<td>Master's</td>
<td>3</td>
<td>2.44</td>
</tr>
<tr>
<td>Nursing</td>
<td>1</td>
<td>.81</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1.63</td>
</tr>
</tbody>
</table>

Comparing these findings to the provincial (BC) baccalaureate educational data for RNs (Statistics Canada, 1991), the study sample was found to have more nurses prepared at the baccalaureate level than the provincial average. Of the respondents, 78.86% held baccalaureate degrees whereas provincially only 15.11% of RNs have baccalaureate degrees. In contrast, only 10.88% of Canadian hospital nurses have baccalaureate degrees (Statistics Canada, 1991).

An explanation for this discrepancy in the level of education is that the
minimum educational requirement for employment for CHNs is a baccalaureate degree or a public health certificate. The public health certificate was last offered in Canada in the 1970s and thus the majority of CHNs hired since that time have had baccalaureate degrees in nursing.

**Research Question #1**

To answer the research question, "What is the level of job satisfaction in the work role of CHNs in British Columbia?," the results of the analysis for each subscale of the McClosky/Mueller Satisfaction Scale (MMSS) are presented in Table 4. Each of the 28 items on the instrument were scored from 1 to 5, with 5 indicating the highest level of job satisfaction. Values for each subscale were calculated by summing up the corresponding items and dividing the total by the number of items in the subscale to obtain a mean value. Average scores less than the midpoint of 3 indicate increasing dissatisfaction in the work role for the particular subscale.

In general, the majority of the study sample were found to be satisfied with their work role. The proximity of the mean and median values for each subscale was roughly symmetrically distributed among the study sample, indicating that the mean value is the appropriate central measure for these data. For three out of the eight subscales (extrinsic rewards, scheduling, and co-workers), over 50% of CHNs reported a moderate level of job satisfaction. Scheduling gave the greatest amount of satisfaction with a mean value of 3.95. Slightly lower levels of satisfaction, with mean values ranging from 3.6 to 3.8, were obtained for the
Table 4

Job Satisfaction of CHNs

<table>
<thead>
<tr>
<th>Subscale</th>
<th>M</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrinsic rewards</td>
<td>3.80</td>
<td>4</td>
</tr>
<tr>
<td>Scheduling</td>
<td>3.95</td>
<td>4</td>
</tr>
<tr>
<td>Balance of Family and Work</td>
<td>3.11</td>
<td>3.33</td>
</tr>
<tr>
<td>Co-workers</td>
<td>3.87</td>
<td>4</td>
</tr>
<tr>
<td>Interaction Opportunities</td>
<td>3.75</td>
<td>3.75</td>
</tr>
<tr>
<td>Professional Opportunities</td>
<td>3.05</td>
<td>3</td>
</tr>
<tr>
<td>Praise and Recognition</td>
<td>3.64</td>
<td>3.75</td>
</tr>
<tr>
<td>Control and Responsibility</td>
<td>3.27</td>
<td>3.40</td>
</tr>
<tr>
<td>Global Job Satisfaction Score</td>
<td>3.56</td>
<td>3.60</td>
</tr>
</tbody>
</table>

Note. Rating scale ranges from 1 = very dissatisfied to 5 = very satisfied. Total job satisfaction scores ranged from 28 to 140.

The majority of the study sample reported satisfaction with the balance of family and work. However, 19 respondents provided written comments on the MMSS questionnaire indicating that maternity leave and child care facilities were...
no longer applicable in their situation and, therefore, they reported neither satisfaction or dissatisfaction with these items. The overall effect of their responses was to slightly lower the average level of satisfaction with the balance of family and work within the study sample. When these individuals were excluded from the data analysis \((n = 104)\), a mean value of 3.14 was obtained.

A probable explanation for scheduling topping the list of satisfiers is the work shift of CHNs. In contrast to most acute and chronic care hospital nurses who work rotating shifts, CHNs work Monday to Friday, usually days, with compensatory time provided for evening and weekend activities such as child health conferences, immunization clinics, and health fairs. Day shift work has also been found to have a stable effect on job satisfaction among hospital nurses (Blegen & Mueller, 1987).

Insight into the reason for lower levels of satisfaction with professional opportunities was provided by written comments on the MMSS by the study sample: 26 CHN's reported a lack of college in their locale or committees in the work setting in which they could participate; 17 CHNs reported being based in sub-offices with limited contact with the formal processes of their central offices; and another 11 CHNs commented on a lack of knowledge about research methods or time to write articles for publication.

The results from the MMSS are consistent with the findings of Clarke at al. (1990) that opportunities for professional development, recognition, relationships, and financial rewards contributed to job satisfaction for CHNs. The results also
support one finding of the Riordan (1991) study on CHNs that social interaction is associated with job satisfaction. In contrast, the results do not support another finding of the same Riordan study, that pay was not significantly related to job satisfaction. On the MMSS, extrinsic rewards include pay and benefits, and interaction opportunities include social interaction. Unlike those in other studies on CHNs (Koerner, 1981; Lucas et al., 1988; Riordan, 1991), the study sample was satisfied with their work role on all MMSS attributes.

Caution is warranted in interpreting these results as an indication that CHNs are satisfied with their jobs. Wallis and Cope (1977), in their research on hospital nurses, indicated that, although the nurses expressed satisfaction with their jobs on the questionnaires, other work-related evidence indicated that they were very dissatisfied with components of their jobs. Cope (1979) offers an explanation for this phenomenon. He posits that if the quality of work life is low over a period of years, employees come to expect this as the accepted level of quality and adjust their expectations accordingly.

Research Question #2

To answer the research question, "What is the level of role conflict in the work role of CHNs in British Columbia?," the results of the analysis of the Role Questionnaire (Abridged Version) are summarized. Each of the items on the instrument was scored from 1 to 5, with 5 indicating the highest level of role conflict. The value for role conflict was calculated by summing up the eight items corresponding to role conflict and dividing the total by eight to obtain a mean
value. Average scores greater than the midpoint of 3 indicate high levels of role conflict.

Values for these data ranged from 1 to 5, with a mean value of 2.96. The proximity of the mean value and the median (3) indicates that the levels of role conflict were symmetrically distributed among the study sample and, therefore, the mean is the appropriate central measure for the data. The results indicate an overall level of role conflict slightly less than the midpoint of 3, indicating that there was an moderate level of role conflict in the work role of the study sample.

**Research Question #3**

To answer the research question, "What are the relationships among the variables, job satisfaction and role conflict, and the demographic characteristics of age, length of job tenure, educational background, and experience in nursing among CHNs in British Columbia?," Pearson product moment correlations were calculated and multiple regression analyses were carried out on data from all three instruments.

**Pearson Product Moment Correlations**

The Pearson product moment correlation was used to assess the linear association between role conflict and each of the eight subscales of job satisfaction and to measures the strength of the relationship between the two variables (r). The r value lies between -1 and 1 with 0 indicating no relationship. When r>0, it indicates a positive relationship and when r<0, it indicates a negative relationship. The r squared value indicates the percentage of the total
variability in each of the eight job satisfaction subscales that can be accounted for by role conflict. Using a test of statistical significance ($p < .05$) an $r$ value of greater than .177 indicates a significant relationship (Cohen, 1977). The sign is ignored because the test is two tailed. The strength of the relationship is also determined by the $r$ value. In behavioural studies such as this one, an $r$ value of $< .50$ is considered strong, between .36 and .50 moderate, and between .18 and .36 weak (Cohen, 1977).

The results indicate that role conflict correlates most strongly with the praise and recognition ($-.60$), and control and responsibility ($-.58$) subscales; moderately with the extrinsic rewards ($-.49$), interaction opportunities ($-.47$), scheduling ($-.37$), and co-workers ($-.37$) subscales; and weakly with the balance of family and work ($-.23$) and professional opportunities ($-.19$) subscales (Table 5). A weak association was also found between education and the control and responsibility ($-.22$). Age and experience are strongly associated at .83, as are job tenure and experience at .69, and age and job tenure at .59. The subscales of the MMSS correlated with each other with varying strengths.

The praise and recognition subscale had the strongest correlation with the control and responsibility subscale (.63). Strong correlations were also found for the subscales of extrinsic reward and control and responsibility (.52), and interaction opportunities and professional opportunities (.51).

The results indicate a significant negative linear relationship between all eight job satisfaction subscales and role conflict. The greatest amount of variance
Table 5
Correlations of Job Satisfaction Subscales, Role Conflict, and Demographic Characteristics

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Age</td>
<td>1.00</td>
<td>.59*</td>
<td>-.10</td>
<td>.63*</td>
<td>.11</td>
<td>.03</td>
<td>-.01</td>
<td>.09</td>
<td>.14</td>
<td>.04</td>
<td>.15</td>
<td>.19*</td>
<td>.14</td>
</tr>
<tr>
<td>2 Job Tenure</td>
<td>1.00</td>
<td>-.13</td>
<td>.69*</td>
<td>-.01</td>
<td>.09</td>
<td>-.05</td>
<td>.11</td>
<td>.12</td>
<td>.04</td>
<td>.18*</td>
<td>.02</td>
<td>.06</td>
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<td>-.06</td>
<td>.11</td>
<td>-.15</td>
<td>-.11</td>
<td>-.08</td>
<td>-.13</td>
<td>-.08</td>
<td>-.10</td>
<td>-.06</td>
<td>-.22*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Experience</td>
<td>1.00</td>
<td>-.05</td>
<td>-.05</td>
<td>-.09</td>
<td>.09</td>
<td>.10</td>
<td>.01</td>
<td>.16</td>
<td>.11</td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Role Conflict</td>
<td>1.00</td>
<td>-.49*</td>
<td>-.37*</td>
<td>-.23*</td>
<td>-.37*</td>
<td>-.47*</td>
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<td>-.50*</td>
<td>-.58*</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>6 Extrinsic Rewards</td>
<td>1.00</td>
<td>.36*</td>
<td>.33*</td>
<td>.34*</td>
<td>.23*</td>
<td>.25*</td>
<td>.46*</td>
<td>.52*</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>7 Scheduling</td>
<td>1.00</td>
<td>.32*</td>
<td>.26*</td>
<td>.28*</td>
<td>.24*</td>
<td>.41*</td>
<td>.45*</td>
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<td>8 Work and Family</td>
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<td>.18*</td>
<td>.33*</td>
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<td>.37*</td>
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<tr>
<td>9 Co-workers</td>
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<td>.30*</td>
<td>.45*</td>
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<td>10 Interaction</td>
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<td>.43*</td>
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<tr>
<td>11 Professional Opportunities</td>
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<td>.48*</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Praise and Recognition</td>
<td>1.00</td>
<td>.63*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Control and Responsibility</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

*p < .05, two tailed.

explained by role conflict occurred in praise and recognition (36%) with the least variance in professional opportunities (4%). Significant relationships were also found for education and control and responsibility (-.22), age and praise and recognition (.19), and length of job tenure and professional opportunities (.18).

The greatest amount of variance explained by a demographic variable was education in relation to control and responsibility (4.8%). The amount of variance explained by the other demographic variables with the corresponding subscales.
was slightly lower, 3.2% for job tenure and 3.6% for age. All relationships were significant at the $p > .05$ level.

The negative relationship between role conflict and the job satisfaction subscales indicates that role conflict is reduced with an increase in any of the eight subscale items. The stronger correlations of praise and recognition, and control and responsibility suggest that these variables in the work role would have a greater influence on the relationship between job satisfaction and role conflict than balance of family and work.

This negative relationship between job satisfaction and role conflict is consistent with the role episode model. In light of the model, the study samples' expectations about the items in the eight job satisfaction subscales were congruent with what they actually received in the work role and therefore, role conflict was reduced. These results are consistent with the findings among acute care hospital nurses regarding the relationship between job satisfaction and role conflict (Bedian et al., 1981; Brief et al., 1979; Jackson, 1983; Pilkington & Wood, 1986; Posner & Randolph, 1980; Randolph & Posner, 1981; Schuler et al., 1977; Sowell & Alexander, 1989; Zahra, 1985).

A possible reason that praise and recognition had the strongest correlation with role conflict is because CHNs, as people, have a basic need for self-regard (Rogers, 1959). This need has a strong influence on interpersonal relationships. A positive reaction from supervisors, colleagues, and clients gives the CHN a perception of being valued. This feeling gratifies the CHN's need for self-esteem
and generates a positive attitude towards the role sender. The amount of praise and recognition required by the CHN is individual. However, the closer the fit between the amount expected and the amount received, the greater the feeling of being valued, and the more positive an interpersonal relationship. The more positive the interpersonal relationship, the lower the level of role conflict.

Control, often referred to as autonomy in other nursing studies, and responsibility are considered to be important factors in role conflict because of the nature of the work activities of CHNs. Due to the variety of the needs of clients, families, and the community, the CHNs have high levels of latitude and discretion over their daily work schedules and in determining strategies to be utilized in the work role. CHN’s have come to expect these levels as appropriate. Therefore, conflict arises when there is pressure from the role senders to impose constraints (e.g., establishing a fixed length of time for new baby visits).

One explanation for the weaker association between the balance of family and work and role conflict is that CHNs are more able to fit their work roles around their family life due to their flex-time schedule. When the CHN’s work evenings and weekends, they are able to schedule compensatory time off during regular work hours. Therefore, their level of role conflict would be lower as a greater congruency exists between the demands of family life and the flexibility of the work schedule. Moreover, increasing the nurses’ control over work schedules has been found to improve job satisfaction (Bulloch, 1984).
A possible explanation for the negative relationship between education and satisfaction with control and responsibility is that different expectations of control and responsibility may be characteristic of different educational backgrounds. Therefore, the expectations that result from some educational backgrounds fit more closely with the level of control and responsibility inherent in the work role of the CHN than others.

Since different expectations result from each educational background, the goodness of fit between what is expected and what is received varies. For those CHNs with a public health certificate and generic baccalaureate education, there is a close fit and, therefore, they are more satisfied. For those CHNs with a post-basic baccalaureate education or master’s degree there is a lack of fit and therefore, they are less satisfied. Despite the fact that the post-basic baccalaureate education challenges the CHN to change her/his expectations of control and responsibility, lengths of job tenure greater than two years in the hospital system may have reinforced the expectations that stemmed from the original diploma program. Therefore, these expectations predominate. In contrast, master’s prepared nurses were more likely to have been CHNs to begin with and add to their expectations new strategies to utilize in the work role.

**Multiple Regression Analysis**

Multiple linear regression analysis (MRA) was carried out to determine which independent variables predicted job satisfaction (Tables 6). MRA estimates the mean square value of each of the job satisfaction subscales on the basis of each of
the independent variables (age, length of job tenure, educational background, experience in nursing, role conflict). It determines if each of the independent variables have a significant linear relationship with each subscale, while holding the effect of the other independent variables constant. The test for the relationship follows a $t$ distribution with a significance level of .05, two tailed, and 117 degrees of freedom. A $t$ value of greater than 1.66 or less than -1.66 is significant (Cohen, 1977). A significant linear relationship indicates that the independent variable predicts satisfaction with that particular subscale. The Beta ($B$) weights, which represent the hypothesized population, and the $b$ weights, which represent the sample, indicate the magnitude of the influence of each independent variable on job satisfaction.

The final regression procedure, stepwise regression, determines the best model of the relationship between role conflict and job satisfaction. The model selected was the eight job satisfaction subscales as the dependent variables and role conflict as the independent variable. Role conflict was selected as it was the only independent variable correlated to all eight subscales. From the data, scores on the subscale of praise and recognition were entered in step 1 of the procedure, scores on the subscale of control and responsibility were added in step 2, and scores on the subscale of extrinsic rewards were added at step 3. No other subscales were added as they did not increase the explained variance.

Role conflict was found to have the strongest relationship with global job satisfaction (Table 6). The relationship was negative indicating that a higher level
Table 6

Linear Relationships Between Subscales for Job Satisfaction and Role Conflict and Demographic Characteristics

<table>
<thead>
<tr>
<th>Job Satisfaction Subscales</th>
<th>Role Conflict</th>
<th>Age</th>
<th>Tenure</th>
<th>Education Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrinsic Rewards</td>
<td>-6.05*</td>
<td>.76</td>
<td>2.16*</td>
<td>-.92</td>
</tr>
<tr>
<td>Scheduling</td>
<td>-4.19*</td>
<td>.80</td>
<td>.24</td>
<td>-.73</td>
</tr>
<tr>
<td>Balance of Work and Family</td>
<td>-2.53*</td>
<td>-.26</td>
<td>.74</td>
<td>-.47</td>
</tr>
<tr>
<td>Co-workers</td>
<td>-4.05*</td>
<td>.45</td>
<td>.79</td>
<td>-.90</td>
</tr>
<tr>
<td>Interaction Opportunities</td>
<td>-5.69*</td>
<td>-.25</td>
<td>.62</td>
<td>-.31</td>
</tr>
<tr>
<td>Professional Opportunities</td>
<td>-4.38*</td>
<td>-.31</td>
<td>1.22</td>
<td>-.43</td>
</tr>
<tr>
<td>Praise and Recognition</td>
<td>-7.78*</td>
<td>1.47</td>
<td>-.91</td>
<td>.20</td>
</tr>
<tr>
<td>Control &amp; Responsibility</td>
<td>-7.37*</td>
<td>.85</td>
<td>.05</td>
<td>-2.01*</td>
</tr>
<tr>
<td>Global Job Satisfaction</td>
<td>-8.98*</td>
<td>.78</td>
<td>1.02</td>
<td>-1.23</td>
</tr>
</tbody>
</table>

Note. Degrees of freedom = 117. $p < .05$, two tailed.
of role conflict predicted a lower level of job satisfaction. A medium relationship was found with praise and recognition and control and responsibility. Weaker relationships were found for extrinsic rewards, scheduling, co-workers, interaction opportunities, and professional opportunities. The weakest relationship was found for balance of work and family.

These results indicate that an increase in total job satisfaction and any of the eight subscales would be associated with a reduction in role conflict. The \( b \) weights indicate that role conflict would be reduced by approximately one half a unit with a one unit increase in total job satisfaction, praise and recognition, control and responsibility, or extrinsic rewards (Table 7). The variance explained by the group of independent variables on total job satisfaction (44\%) suggests that other factors not considered in this study also influence job satisfaction.

Although role conflict was found to be the strongest predictor of all the job satisfaction subscales, length of job tenure and experience in nursing were also found to predict satisfaction with extrinsic rewards, and education was also found to predict satisfaction with control and responsibility (Table 7).

However, the \( R^2 \) squared values indicate that the relationships between both length of job tenure and experience in nursing, and extrinsic rewards have variances of less than 1\%. Although these relationships are statistically significant, the variances suggest that both length of job tenure and experience in nursing have a negligible influence on satisfaction with extrinsic rewards.
Table 7

Linear Relationships Between the Subscales for Job Satisfaction and Role Conflict

<table>
<thead>
<tr>
<th>Job Satisfaction Subscales</th>
<th>B</th>
<th>b</th>
<th>R-Sqr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrinsic Rewards</td>
<td>-.48</td>
<td>-.44</td>
<td>.24</td>
</tr>
<tr>
<td>Scheduling</td>
<td>-.36</td>
<td>-.30</td>
<td>.14</td>
</tr>
<tr>
<td>Balance of Work and Family</td>
<td>-.23</td>
<td>-.21</td>
<td>.05</td>
</tr>
<tr>
<td>Co-workers</td>
<td>-.35</td>
<td>-.30</td>
<td>.13</td>
</tr>
<tr>
<td>Interaction Opportunities</td>
<td>-.47</td>
<td>-.37</td>
<td>.22</td>
</tr>
<tr>
<td>Professional Opportunities</td>
<td>-.37</td>
<td>-.27</td>
<td>.14</td>
</tr>
<tr>
<td>Praise and Recognition</td>
<td>-.58</td>
<td>-.57</td>
<td>.35</td>
</tr>
<tr>
<td>Control and Responsibility</td>
<td>-.55</td>
<td>-.60</td>
<td>.33</td>
</tr>
<tr>
<td>Global Job Satisfaction</td>
<td>-.63</td>
<td>-.38</td>
<td>.42</td>
</tr>
</tbody>
</table>

Note. Degrees of freedom = 117. *p<.05, two tailed.

The results of a stepwise regression indicated that 60% of satisfaction with control and responsibility and praise and recognition can be accounted for by role conflict. These results suggest that when the CHNs' expectations of control and
responsibility and praise and recognition are congruent with what is actually received in the work role, they adapt to the majority of role conflict inherent in their jobs.

The findings indicate that the role episode model does not fully explain the relationships among the variables, job satisfaction and role conflict, and the demographic characteristics. Support was found for a negative relationship between job satisfaction and role conflict. However, no evidence was found to support a relationship between demographic characteristics and role conflict or total job satisfaction. Nonetheless, educational background was negatively associated with satisfaction with control and responsibility, and positive associations were found with age and praise and recognition, and length of job tenure and professional opportunities.

Summary

In this chapter, the findings of this study on a sample of 123 community health nurses in Preventive Services in the Province of BC have been presented. The demographic profile of the study sample indicated that CHNs had a higher level of education, and were generally older than their peers in the hospital and registered nurses in BC. They had long lengths of job tenure and experience but information was not available to compare them to other groups.

Statistical analysis of the data gathered from the study instruments indicated that the study group were satisfied with the eight attributes of their jobs with a moderate level of role conflict. Specifically, they were most satisfied with
scheduling, co-workers, extrinsic rewards, and interaction rewards. They were least satisfied with professional opportunities. The study group experienced moderate levels of role conflict. Analysis indicated that lower levels of education were associated with greater satisfaction with control and responsibility. The strongest relationship was found between total job satisfaction and role conflict. Furthermore, the strongest relationships between the job satisfaction subscales and role conflict were praise and recognition and control and responsibility. This suggests that control and responsibility and praise and recognition have the greatest influence on the CHN’s ability to adapt to role conflict. However, the role episode model does not completely explain the relationships among the variables under consideration.
CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

A synopsis of the study and a discussion of the significance of the findings for nursing is presented in this Chapter. It is divided into three sections: a summary of the study, the conclusions suggested from the findings, and the implications of the findings for nursing practice, administration, education, and research.

Summary

The role of the community health nurse is expanding due to an increasing support for health promotion. With a greater emphasis on this aspect of the community health nurse's role, there is a potential for decreased job satisfaction. When the CHNs assume the expanded role, the resulting role conflict can lead to role stress and role strain and, eventually, decreased job satisfaction. Decreased job satisfaction has been associated with other CHN role changes and could lead to turnover. Although research has indicated a lack of job satisfaction among CHNs, no studies were identified that described the relationship between job satisfaction and role conflict. The purpose of this study was to assess levels of job satisfaction and role conflict among CHNs in the province of BC, and to examine the relationship between these two constructs and selected demographic characteristics.
A descriptive correlational design was selected to explore the extent to which role conflict and selected demographic characteristics related to job satisfaction among CHNs. The role episode model (Kahn et al., 1964) provided the framework for the study. The research questions which guided the study were: 1) What is the level of job satisfaction in the work role of CHNs in British Columbia?; 2) What is the level of role conflict in the work role of CHNs in British Columbia?; and 3) What are the relationships among the variables, job satisfaction and role conflict, and the demographic characteristics of age, length of job tenure, educational background, and experience in nursing among CHNs in British Columbia? Data were collected through the use of two standardized instruments, the McClosky/Mueller Satisfaction Scale for job satisfaction and the Role Questionnaire (Abridged Version) (Rizzo et al., 1970) for role conflict. The Nurse Demographics Questionnaire, developed by the researcher, was used to collect data on the demographic characteristics.

Two hundred and forty CHNs who were employed in full- or part-time community health staff positions and who held the public health certificate or baccalaureate degree were sent the three instruments. CHNs in the Long Term Care and Home Care Programs were excluded. A total of 123 sets of instruments from CHNs who met the criteria were used in the analysis. The data generated were analyzed using the computer program, Number Cruncher Statistical Systems. The statistical tests used were descriptive statistics, Pearson product moment correlations, and multiple regression analysis.
A profile of the study group was generated from the data of age, length of job tenure, educational background and experience in nursing. The study sample was largely in their middle years with approximately 68% between the ages 32 and 50. The ages ranged from 24 to 66 years. The average length of job tenure was 7.69 years; however, over half of respondents had remained in their present position for five years or longer. Length of experience since registration as an RN averaged 16.61 years.

Most of the CHNs in the sample held a baccalaureate degree in nursing, with 43.9% having basic preparation at that level and 32.52% having upgraded to that level. Eighteen percent held public health certificates and 2.4% were prepared at the master’s level.

The first research question pertained to the level of job satisfaction in the work role of CHNs. The results indicated that the respondents were satisfied in their work role. Scores on the subscales of scheduling, extrinsic rewards, and coworkers indicated that the study sample experienced the most satisfaction in these areas. Scores on the subscales of interaction opportunities, and praise and recognition indicated slightly lower levels of satisfaction. The lowest levels of satisfaction were indicated by the scores on the subscales of control and responsibility, balance of work and family, and professional opportunities.

The second research question related to the level of role conflict. The findings support the conclusion that the respondents experienced a moderate level of role conflict.
The final question was aimed at the relationship among the variables, job satisfaction and role conflict, and the demographic characteristics of age, length of job tenure, educational background, and experience in nursing. The results of the Pearson product moment correlations indicated a significant negative relationship between all eight job satisfaction subscales and role conflict. The strongest relationship was between praise and recognition. Weak but significant relationships were also found for education and control and responsibility, age and praise and recognition, and length of job tenure and professional opportunities. No significant relationships were found between role conflict, age, length of job tenure, educational background, and experience in nursing.

The results of the multiple regression analysis indicated that role conflict was most strongly related to global job satisfaction. Strong relationships were also found between role conflict, and praise and recognition and control and responsibility. Educational background was also found to predict the degree of satisfaction with control and responsibility. The results of the stepwise regression indicated that 60% of satisfaction with control and responsibility and praise and recognition can be accounted for by role conflict.

Conclusions

The results of the data analysis suggest the following major conclusions:

1. CHNs were generally satisfied with their work role.
2. CHNs experienced moderate levels of role conflict in the work role.
3. A negative relationship existed between job satisfaction and role conflict.
4. Praise and recognition, and control and responsibility, had the greatest influence on the CHNs' ability to adapt to their perceived level of role conflict. Conversely, balance of work and family had a minimal influence on the CHNs' ability to adapt to their perceived level of role conflict.

5. The role episode model does not fully explain the relationships among the variables, job satisfaction and role conflict, and the demographic characteristics among CHNs.

Implications for Nursing

The conclusions derived from the findings of this study have implications for all areas of nursing. This section presents a discussion of the implications for the four areas of nursing: administration, practice, education, and research.

Nursing Administration

The CHNs in this study were satisfied with all eight elements of the work role. Nurse managers need to create and maintain employment conditions that maintain the present level of job satisfaction. This can be accomplished by using the principle of planned change when it is necessary to make adjustments in any of the eight attributes of the work role. Planned change includes facilitating recognition by the CHNs that change is needed, and participation of the CHNs in identifying the problem, generating alternate solutions, formulating the goal and objectives for addressing the problem, and developing the implementation plan. According to Lancaster (1985), recognition that nurses have a valuable
contribution to make to work role goals facilitates a work climate that fosters job satisfaction.

Despite the finding that the study sample was satisfied with all eight attributes, CHNs could be more satisfied. Nurse managers need to continually strive to develop a work climate which facilitates job satisfaction. Nurse managers are responsible for providing opportunities for the improvement to occur. These could include participation in organizational decision-making, recognition of the CHNs’ work by supervisors, inclusion in departmental and institutional committees, and provision of time to write and publish and to participate in research as appropriate.

Nurse managers could also be guided by the findings that control and responsibility and praise and recognition had the greatest impact on the CHNs’ ability to adapt to their perceived level of role conflict. With lower levels of satisfaction with control and responsibility reported in this study, nurse managers need to facilitate an increase in satisfaction with control and responsibility to help reduce the moderate level of role conflict. Nurse managers need to collaborate with the CHNs to identify the areas of control and responsibility that are deficient or reduced in the work role and facilitate the establishment and implementation of solutions.

Finally, it may be that CHNs acquire different expectations of control and responsibility based on the skills and knowledge from varied educational backgrounds and experience. However, it may be that CHNs with different
educational backgrounds volunteer for specific subroles inherent in the work role and thereby reduce some of the role conflict. Nurse managers need to create opportunities for CHNs who want different levels of control and responsibility in the work role. For those CHNs who want more, these opportunities could include delegation of some of the nurse manager's responsibilities such as acting as a liaison to some outside agencies, spokesperson for Preventive Services to some external groups, and entrepreneur in scanning Preventive Services and its environment to develop innovative strategies to carry out its mission. For those CHNs who want less, opportunities could include assignment of specialized responsibilities such as child health conferences and epidemiological follow-up.

With newly-employed CHNS, nurse managers need to assess their needs (e.g., skill and knowledge) and develop individualized orientation programs. Kenyon, Smith, Hefty, Bell, McNeil, and Martaus (1990) suggested that acute care hospital nurses may not have the same degree of skill in assessment of communities, individuals, and families, decision-making, case management, health care system management, teaching, and leadership that is required in community health nursing. It may require the nurse manager to work individually with the new CHN to enable the acquisition of the appropriate skills and knowledge required in the work role. All of the above actions by nurse managers could lead to increased comfort with the level of control and responsibility inherent in the work role. Moreover, Biddle (1986) indicated that expectations can be learned through experience. Therefore,
nurse managers could coordinate a buddy system where the new CHN was paired with an appropriate role model for an extended period of time.

**Nursing Practice**

The study’s findings indicated that the CHNs were least satisfied with control and responsibility, balance of family and work, and professional opportunities. With increased awareness of these areas of less satisfaction, CHNs have data to substantiate job needs to their employers. They need to present their expectations regarding control and responsibility, balance of family and work, and professional opportunities to their employers so that the employers can facilitate change that could lead to increased job satisfaction. Employers need to recognize that satisfied CHNs are one of the outcomes of an effective organization (Nadler & Tushman, 1980).

The study sample reported limited ability to participate in professional opportunities. These included participation in organizational decision-making, research, and publishing. Involvement of CHNs in organizational decision-making increases the chances of organizational goal achievement (Sullivan & Decker, 1988). CHNs need to recognize that the diversity of their knowledge about the needs of the clients, families, and communities is a valuable resource for the health department’s planning process. To facilitate their involvement in the process, CHNs need to articulate the value of their contributions and to promote their involvement.
In addition, CHNs need to view participation in research as a responsibility of all nurses. The clinical practice of the CHN provides one of the sources of phenomena to which research can be directed. Through research, theory is developed and tested to determine its applicability to community health nursing. The CHN then uses this theory and contributes to its modification. This process of theory development, testing, and modifying is a vital component for the advancement of community health nursing practice as it establishes its credibility.

The findings also indicate that CHNs are most satisfied with scheduling. It may be that the flexibility to schedule flex-time during regular working hours accommodates some of the demands of the family role. This type of flexibility has motivated some nurses to upgrade their education from a diploma to a baccalaureate degree in order to secure positions in community health nursing. In this study, post-RN baccalaureate-prepared nurses make up approximately one third of CHNs. Therefore, CHNs need to promote to their employers the importance of flex-time in maintaining the present level of job satisfaction.

**Nursing Education**

The negative relationship between level of educational preparation and control and responsibility suggests that CHNs with public health certificates are more satisfied with the level of control and responsibility in the work role than are basic and post-RN baccalaureate-prepared CHNs. It may be that the expectations of control and responsibility and the corresponding skills and knowledge advocated in the present baccalaureate curriculum are not as closely aligned to the reality of
the work role as those advanced in the former public health certificate programs. Nurse educators need to recognize as important the differences in knowledge and skills required in the CHN work role as compared to other nursing roles. CHNs need knowledge and skills such as community development processes that are specific to their own work role. These skills and knowledge may assist CHNs to reduce the disparities between the expectations of control and responsibility derived from their education and the actual level of control and responsibility in the CHN work role. Such knowledge and skills can best be offered through specific courses and practicums in community health nursing. However, as the need for specialization in nursing is becoming increasingly evident due to the complex requirements of the role, one alternative to achieving this specialization is to offer master’s level programs in community health nursing.

Furthermore, a trend in nursing education is an increase in the number of diploma-prepared nurses upgrading to the baccalaureate degree. Many of these nurses are enroled in distance baccalaureate programs. It may be that the lack of classroom contact with peers promotes less integration of a different set of expectations about responsibility and control. Therefore, distance educational programs may need to develop creative ways to increase the likelihood of acceptance of a broader range of responsibility and control strategies beyond such things as workload, delivery of care method, and choice of shift patterns. These include practicums and pairing with health unit-based CHNs, teleconferencing with
other extension students, and coordinating the meeting of extension students in the same locales.

However, as experience is important in establishing expectations, nurse educators should consider the implementation of perceptorships of three to six months for all baccalaureate-prepared nurses who wish to pursue community health nursing. These perceptorships could increase the level of skills and knowledge of community health nursing and, in turn, establish a set of expectations of control and responsibility compatible with those inherent in the work role.

Moreover, with the trend in British Columbia to reduce hospital beds, the resulting down-sizing of hospital nursing staff and a greater emphasis on community-based care, baccalaureate-prepared nurses from acute care hospital settings may be entering community health nursing practise. Nurse educators need to develop continuing education programs that upgrade the skills and knowledge of these nurses so that they feel they have control over what goes on in their work setting and over work conditions, and are comfortable with the amount of responsibility inherent in the work role. These areas could include assessment of communities, individuals, and families, decision-making, case management, health care system management, teaching, and leadership (Kenyon et al., 1990).
Nursing Research

The generalizability of this study is limited by a number of factors that were not assessed. One of these is the differing role expectations among the health departments in the province of BC. It would be necessary to replicate the study to determine how these differences influence job satisfaction. The study was limited to the province of BC; it would be important to replicate the study in other provinces in Canada to determine if the relationships described in this study are consistent across the country.

Since the results of the study suggest that other variables have as strong an influence on total job satisfaction as those assessed in the study, it would be important to consider the influence of other factors, such as role ambiguity, on job satisfaction. Such a study would contribute further to our knowledge about what factors influence job satisfaction in the work role of CHNs. Presently, the turnover among CHNs is low; however, it would be important to develop baseline data should this situation change with the implementation of the expanded role.

In addition, the finding that the six subscales, excluding praise and recognition and control and responsibility, did not increase the explained variance in role conflict suggests that other elements in the work role not considered in this study have a significant impact on the CHN’s ability to adapt to role conflict. This directs researchers to look at other elements in the work role such as the supervisor’s use of power or leadership style, to gain a more thorough understanding of the relationship between job satisfaction and role conflict.
The findings can also provide direction for research contributing to a body of knowledge that could be of interest to community health nursing. The following research questions are derived from four conclusions:

1. CHNs experienced moderate levels of role conflict in the work role.  
   - what are the sources of role conflict in the work role of Preventive Services CHNs in British Columbia?

2. The lower the level of educational preparation of the CHN, the greater the satisfaction with control and responsibility.  
   - what are the types of control and responsibility inherent in the work role of Preventive Services CHNs in British Columbia?  
   - what are the differences in the expectations of control and responsibility between CHNs with public health certificates, basic baccalaureate degrees in nursing, post-RN baccalaureate degrees in nursing, and master’s degrees in nursing?

3. The study sample was least satisfied with professional opportunities.  
   - what are the type of professional opportunities expected by Preventive Services CHNs in British Columbia?

The finding that satisfaction with praise and recognition and control and responsibility had the greatest impact on the CHN’s ability to adapt to their perceived level of role conflict directs researchers to look at how this reduction can be achieved. For example, how do Preventive Service CHNs use praise and recognition and control and responsibility to reduce role conflict?
Finally, the relationship between job satisfaction and role conflict in this study may be dependent on the instrument used rather than any relationship between the two variables. Therefore, it would be valuable to replicate the findings using a variety of nurse satisfaction instruments to determine if the relationship was consistent.

The findings of this descriptive correlational study have indicated that satisfaction with the attributes of the CHN's work role is associated with a reduction in role conflict. This relationship is consistent with the role episode model and that found among acute care hospital nurses. With increased awareness of the relationship between job satisfaction and role conflict there is potential for nurse managers to develop a work climate that maintains the present level of job satisfaction and role conflict, reduces the forces that lead to job dissatisfaction, and fosters the development of increased job satisfaction. Nurse managers are challenged to be creative in facilitating increased involvement of CHNs in designing solutions to issues in the work role. The CHNs benefit from the increased awareness of sources of job satisfaction as they have information to substantiate job needs to their employers. The recognition that educational background is related to satisfaction with control and responsibility benefits future CHNs as it supports the value and need for specialized skills and knowledge in community health nursing. Additional research is required to define and classify the concepts of role conflict, control and responsibility, praise and recognition, and professional opportunities in community health nursing. In addition, the findings
provide direction for research contributing to a body of knowledge about job satisfaction and role conflict in community health nursing.
REFERENCES


**APPENDIX A**

McCloskey/Mueller Satisfaction Scale (MMSS)
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How satisfied are you with the following aspects of your current job? Please circle the number that applies.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Very Satisfied</th>
<th>Moderately Satisfied</th>
<th>Neither Satisfied nor Dissatisfied</th>
<th>Moderately Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. salary</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. vacation</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3. benefits package (insurance, retirement)</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4. hours that you work</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5. flexibility in scheduling your hours</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6. opportunity to work straight days</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7. opportunity for part-time work</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
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</tr>
<tr>
<td>8. maternity leave time</td>
<td>5</td>
<td>4</td>
<td>3</td>
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<tr>
<td>9. child care facilities</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<td>10. your immediate supervisor</td>
<td>5</td>
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<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>11. your nursing peers</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12. the physicians you work with</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Very Satisfied</td>
<td>Moderately Satisfied</td>
<td>Neither Satisfied nor Dissatisfied</td>
<td>Moderately Dissatisfied</td>
<td>Very Dissatisfied</td>
</tr>
<tr>
<td>---</td>
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<td>---------------------</td>
<td>-----------------------------------</td>
<td>------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>13. the delivery of care method used in your unit (e.g. functional team, primary)</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>14. opportunities for social contact at work</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>15. opportunities for social contact with your colleagues after work</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<td>16. opportunities to interact professionally with other disciplines</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<td>17. opportunities to interact with faculty of a college of nursing</td>
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<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<td>18. opportunities to belong to department and institutional committees</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<td>19. control over what goes on in your work setting</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>20. opportunities for career advancement</td>
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<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Very Satisfied</td>
<td>Moderately Satisfied</td>
<td>Neither Satisfied nor Dissatisfied</td>
<td>Moderately Dissatisfied</td>
<td>Very Dissatisfied</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>21. recognition for your work from supervisors</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>22. recognition of your work from peers</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>23. amount of encouragement and positive feedback</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>24. opportunities to participate in nursing research</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>25. opportunities to write and publish</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>26. your amount of responsibility</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>27. your control over work conditions</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>28. your participation in organizational decision making</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
APPENDIX B

Role Questionnaire (Abridged Version)

With respect to YOURSELF and YOUR JOB, please indicate your AGREEMENT or DISAGREEMENT with each statement listed below by CIRCLING the appropriate response according to the following scale:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither Agree Nor Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

- I have to do things on my job that should be done differently.  
  ![Circles](1 2 3 4 5)
- I work on unnecessary things.  
  ![Circles](1 2 3 4 5)
- I receive an assignment without adequate resources and materials to execute it.  
  ![Circles](1 2 3 4 5)
- I receive an assignment without the manpower to complete it.  
  ![Circles](1 2 3 4 5)
- I do things that are apt to be accepted by one person and not accepted by others.  
  ![Circles](1 2 3 4 5)
- I work with two or more groups that operate quite differently.  
  ![Circles](1 2 3 4 5)
- I receive incompatible requests from two or more persons.  
  ![Circles](1 2 3 4 5)
- I have to oppose a rule or policy in order to carry out an assignment.  
  ![Circles](1 2 3 4 5)
APPENDIX C

Nurse Demographics Questionnaire

INSTRUCTIONS: Please write the appropriate answer in each category.

1. AGE Please indicate your age at your last birthday. ____years

2. LENGTH OF JOB TENURE Please indicate the length of time you have been in your current employment. ____years

3. EDUCATIONAL BACKGROUND Please indicate the highest level of educational preparation you have achieved.
   ____Diploma (College or Hospital School)
   ____Public Health Certificate
   ____Baccalaureate-Nursing
   ____Basic
   ____Post-R.N.
   ____Baccalaureate-Other
   ____Masters’
   ____Nursing
   ____Other

4. EXPERIENCE IN NURSING Please indicate the total number of years that you have been employed in a nursing position since you first became registered. ____years of experience
Dear Community Health Nurse:

I am writing to ask you to participate in a nursing study, titled "Job Satisfaction and Role Conflict among Community Health Nurses". My name is Maggie Tomich and I am a former community health nurse. Presently, I am a second year student in the Master’s program in nursing at the University of British Columbia. The experience that I had as a community health nurse, a growing concern voiced by the members of the Community Health Nurse Practice Group about the impact of continuing changes in the role of the CHN on job satisfaction, and the document "Vision for Tomorrow: A Public Health Nurse Driven Future for Public Health Nursing" by Heather Clarke, Gail Beddome and Nora Whyte (1990) stimulated my interest in learning more about the level of job satisfaction and role conflict among community health nurses in this province. I believe that empowering nurses by providing a way to substantiate job needs is the first step to creating a job climate that fosters role harmony and job satisfaction. Consequently, I have chosen this topic to fulfil my thesis requirement.

To participate in this study, you must be a nurse working in Preventive Services. In order, to get the best possible sample some nurses such as those working in the Long Term Care Program may have received this letter. If you are a long term care nurse, I thank you for reading this letter but I request that you do not return the instruments and disregard the follow-up postcard.

Completion of the instruments constitutes consent to participate in this study. Your participation is voluntary. You have the right to refuse to participate. As you were selected and this study was mailed out by the RNABC at my expense, your identity is not known to me and you are not required to identify yourself on the return envelope or instruments. To ensure your anonymity but permit access to the study results, the completed thesis will be available from the collection at the library of the RNABC after September 30, 1992.

If you are a nurse in Preventive Services and wish to participate in this study, please proceed and fill out the three instruments. Completion will take about half an hour. There are five pages. Please read the instructions at the top of each section before proceeding with completion. There is no right or wrong response. Complete all five pages and then return them in the stamped self-addressed return envelope included.

The returned instruments will be accessible to the members of my thesis committee, Professor Ray Thompson and Dr. Sonia Acorn, and a statistics consultant. At the completion of my thesis all instruments will be destroyed by burning.
Although the findings may have implications for nurse managers in implementing future CHN role changes, participants in this study are not expected to experience these benefits directly. However, as a participant, you have the opportunity to share your experiences with job satisfaction and role conflict in your present job. There are no financial benefits or expected risks associated with this study.

If you have any inquiries about this study, please contact me at 524-1096 or my thesis supervisor, Professor Ray Thompson at 822-7454. It is not necessary to identify yourself during the inquiry.

Thank you for your consideration.

Yours sincerely,

Maggie Tomich.