JOB SATISFACTION AMONG HOSPITAL-EMPLOYED NURSES

by

JANET HELEN WALKER

B.S.N., The University of British Columbia, 1980

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN NURSING

in

THE FACULTY OF GRADUATE STUDIES

School of Nursing

We accept this thesis as conforming to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

April 1990

© Janet Helen Walker, 1990

In presenting this thesis in partial fulfilment of the requirements for an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and study. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the head of my department or by his or her representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Nursing Department of

The University of British Columbia Vancouver, Canada

april' 11/ 90 Date

Abstract

This descriptive study was designed to further the exploration of job satisfaction among hospital-employed nurses by using an established theoretical formulation of job satisfaction called the Job Characteristics Model (Hackman & Oldham, 1976) and a standardized tool called the Job Diagnostic Survey (Hackman & Oldham, 1980) to identify and measure job design variables and job Specific study questions guided investigation into perceptions of satisfaction. job characteristics and satisfactions among nurses, the relationship between job design variables and job satisfaction, and the relationship between selected nurse characteristics and job satisfaction. The study was conducted at three geographically dispersed acute care hospitals in British Columbia. Α convenience sample of 96 full-time employed registered nurses completed a Nurse Characteristics Questionnaire and a Job Diagnostic Survey. Data were analyzed and compared to normative data using descriptive statistics. Sample data were further analyzed using Pearson's correlation coefficient and the chisquare test of association. Overall, nurses perceived their jobs to be rich in terms of importance, skill variety, and human interaction; but poor in terms of autonomy and the ability to complete a whole and identifiable piece of work. Significant relationships were identified between specific job design variables and job satisfaction. Compared to other professionals, nurses were less satisfied with the autonomy and motivating potential of their job. There was little evidence to support an association between nurse characteristics and job satisfaction.

ii

Table of Contents

							F	'age
Abstract. .		• • •	· · · ·	• • •	· · · · · ·	• • •	• • • • • •	.ii iii . v vi vii
Chapter One: Introduction								
Theoretical Framework <th< td=""><td>•</td><td>• • •</td><td>• • • • • •</td><td></td><td> </td><td>• • •</td><td>• • • • • •</td><td>.5 10 10 11 11</td></th<>	•	• • •	• • • • • •		 	• • •	• • • • • •	.5 10 10 11 11
Chapter Two: Literature Review								
Meaning and Measurement of Job Satisfaction	• •	• • •	• • • • • •		• • • • • •	• • •	 	13 16 20 22
Chapter Three: Methodology								
Instruments	· · ·	• • • •	· · · · · · · · · ·	• • • •	· · · · · · · · · ·		 	25 25 27 28 28 29 31 32
Chapter Four: Findings and Discussion								
Description of the Total Sample and Sample Subgroups Nurse Characteristics Questionnaire	• • • • • • • • • •		 . .<	• • • •	 			33 34 34 40 40 40 40 42 42

Job Diagnostic Survey	43
Normative Data for the JDS	44
Sample Data for the JDS	46
Independent variables (Core Job Dimensions).	46
Intermediate variables (Critical Psychological States).	49
Mediating variable (Growth Need Strength).	50
Dependent variables (Job Satisfactions).	51
Identified satisfactions and lack of satisfactions	55
Results of Correlational Analysis	56
Core Job Dimensions and Job Satisfactions	57
Critical Psychological States and Job Satisfactions	59
Growth Need Strength Critical Psychological States	0,
and Job Satisfactions	61
Analysis of Selected Nurse Characteristics and Job	01
Satisfaction	64
	68
	00
Chapter Five: Summary, Conclusions, and Implications	
Summory	70
Condusions	$\frac{70}{7A}$
	76
Implications for Nursing Administration	76
Implications for Nursing Administration	70
	11
References	80
Appendixes:	
Appendix A. The Job Diagnostic Survey (Hackman & Oldham	
Appendix A - The Job Diagnostic Survey (Hackman & Oldham, 1080)	85
1900)	05
Appendix B - Nurse Characteristics Questionnaire	98
Appendix C - Information Letter for Directors of Nursing	99
Appendix D - Information Letter for Staff Nurses	100
Appendix E - Letter of Consent	101
•	

,

List of Tables

<u>Ta</u>	<u>ble</u>	•	•	•	•	•	•	•	<u>P</u> a	<u>ige</u>
1.	Specific Measures of the Job Diagnostic Survey	•	•		•	•	•	•	•	26
2.	Number of Subjects and Total Full-Time RNs by Hospital	•	•	•	•	•	•	•	•	29
3.	Comparison of JDS Findings Between Study Sample and Normative Group	•	•	•	•	•	•	•	•	45
4.	Intercorrelations Between Core Job Dimensions and Job Satisfactions	•	•	•	•	•	•	•	•	58
5.	Intercorrelations Between Critical Psychological States and Job Satisfactions	•	•	•	•	•	•	•	•	60
6.	Intercorrelations Between Growth Need Strength and Job Satisfactions	•	•	•	•	•	•	•	•	63
7.	Chi-square Results of Selected Personal and Professional Nurse Characteristics and Job Satisfactions	•	•	•		•	•			65

•

List of Figures

<u>Figure</u>	age
1. Job Characteristics Model (Hackman & Oldham, 1976)	.7
2. Educational preparation of nurses by hospital	35
3. Educational preparations of nurses as a percentage of total sample.	36
4. Educational profiles of staff nurses in three categories	39
5. Age distribution of sample	41
6. Employment tenure of sample	41

vi

Acknowledgements

The successful completion of any thesis occurs only with the help and support of a number of people. I would like to thank my thesis committee members, Dr. Marilyn Willman and Ms. Sheila Stanton for their considerable patience and skill in separating wheat from chaff. Appreciation is also extended to the nurse administrators and managers who so kindly welcomed me into their hospitals. Finally, I would like to express a special kind of gratitude to my husband, Michael, for knowing the value and the cost of disciplined thinking.

This thesis is dedicated to the staff nurses who, through their valuable participation, made this research possible.

Chapter One

Introduction

Work is important for the things that it provides. For the individual, work brings significant human values such as personal identity, stimulation, the enjoyment of the work itself, and the knowledge that one's work is important and valuable to others (Renwick & Lawler, 1978). For the organization, the work or job performance is the way in which raw materials are transformed into goods or services. For both parties, employee job satisfaction can enhance these goals.

Organizational literature has suggested that health care jobs (professional, para-professional, and non-professional) are less satisfying than jobs in representative general work groups. Health care employees report lower levels of job involvement, autonomy, clarity, and physical comfort but higher levels of work demands and supervisor control (Frederiksen, 1978; Kahn & Westley, 1984; Moos, 1981; 1986).

Specific to nursing, both practitioners and administrators have been warning the profession that there is a serious problem with respect to job satisfaction (Berns, 1982; Simms, Price & Ervin, 1985; Tirney & Wright, 1973). Extensive nurse surveys in both Canada and United States over the past decade have demonstrated a widespread lack of satisfaction with nursing jobs in general with the least satisfaction being reported by hospital nurses (Godfrey, 1978; Huey & Hartley, 1988; Staff, 1978, April; Staff, 1978, May; Wandelt, Pierce, & Widdowson, 1981).

While studies of job satisfaction have been relatively prolific, they have not been particularly helpful in alleviating the problem because of conceptual and methodological difficulties. Wanous and Lawler (1972), in their comprehensive review of the meaning and measurement of job satisfaction, point out that there is a lack of adequate theory relating to the concept of job satisfaction. In reviewing and applying nine different operational definitions of job satisfaction, these analysts state that the definitions do not yield empirically comparable measures. This is particularly true of attempts to correlate individual variables such as absenteeism and turnover with overall satisfaction measures. Similar inconsistencies have been reported with regard to length of nursing experience, employment tenure, and job satisfaction reported by hospital nurses (McShane, 1985; Munro, 1982; Sanger, Richardson, & Larson, 1985; Seybolt, 1986).

One avenue of some promise with respect to job satisfaction for nurses is in the area of work design. This refers to the various dimensions of the job itself and is exemplified in dimensions such as autonomy, task significance, and feedback (Hackman & Oldham, 1976). Here, research has provided support for the link between at least one work design variable, namely, autonomy and quality of service (Brooten et al., 1986) and job satisfaction for hospital nurses (Seybolt, 1986).

There are a number of reasons why job satisfaction among hospital nurses is an important focus of research. First, hospitals employ the majority of nurses. The Registered Nurses Association of British Columbia reports that 68.6% of all registered nurses are employed in acute care hospitals (Staff, 1986). There are also indicators that the demand for hospital nurses is increasing. Despite a continued increase in employment participation by nurses to the

present all time high rate of 96% (Staff, 1986), hospitals continue to report unfilled nursing positions as documented by surveys (Health Manpower Research Unit, 1986). The Economic Council of Canada (1987) reports that Canadian hospitals are providing increased intensity of service. While these increased services per patient are fairly evenly distributed among the major hospital departments, generally the larger share of increased service has been associated with nursing. Reports from American hospitals are similar: The continuing increased demand for hospital nurses is reflected in the fact that, despite dramatically declining occupancy rates within hospitals, greater numbers of nurses are employed both in the aggregate and in relation to numbers of patients (Aiken & Mullinix, 1987).

Second, the present and projected nurse shortages seen in the United States are related to significant present and future demographic and social trends (Inglehart, 1987). The current age group cohorts of eighteen-year-olds are smaller than they have been in the past and the individuals in these age groups are making career choices other than nursing. Although this circumstance is not yet being experienced in Canada, this country has a consistent history of experiencing demographic and social trends similar to those in the United States, usually with a five or ten year time lag. In Canada, enrolment patterns in nursing programs have remained stable or have slightly increased over the past several years (Statistics Canada and Canadian Nurses Association, 1986). However, nursing leaders are anticipating a decline in applications to nursing schools similar to that experienced in the United States for similar reasons of falling birth rates and expanded career choices for women (Baumgart & Larsen, 1988). Canadian hospitals are currently witnessing the "raiding" of the nursing population by American nurse recruiters (Fletcher,

1987). As the American nurse shortage worsens, Canada can expect more competition from the United States and perhaps other countries for nursing resources. It is important to find the significant factors influencing job satisfaction for hospital-employed nurses and to institute them in an effort to convince nurses to stay in Canada with jobs that bring both personal and professional satisfaction.

The last reason is economic. Evidence of a revolving door syndrome where nurses leave one hospital and carry on at another has significant cost implications not only for the hospital but for the entire health care system. Prescott and Bowen (1987) report that a conservative estimate for the crude turnover rate among hospital nurses in the United States is 30%. This is not unlike a Canadian study wherein the overall turnover rates calculated for a twelve month period ranged from 6.5% to 41.2% (Simpson, 1984). Estimates of costs for recruiting and orienting a professional nurse in the United States have been reported to vary between \$3,000 and \$8,000 (Hinshaw, Smeltzer, & Atwood, 1987). It is unlikely that costs in Canada would be significantly different given the similarity between the countries. A study by Storey (1981), carried out in Nova Scotia, estimated \$3,000 to be the cost of replacing each staff nurse. A related economic issue is that of the appropriate use of nursing In British Columbia, researchers report that nurses spend the resources. majority of their possible career years not employed in nursing (Kazanjian & Wong, 1985). It is reasonable to speculate that if nurses experienced satisfaction in their practice, much of this human resource would not be lost to nursing.

Theoretical Framework

One of the most fruitful theories to define and explain job satisfaction is the motivation-hygiene theory put forward by Herzberg (1966). He worked inductively to demonstrate that certain job factors act as motivators or satisfiers to employees. These factors have to do with psychological growth and are such things as achievement, recognition, and responsibility. The origin of these factors, Herzberg contends, is the higher order human drives or the learned responses to basic needs. Other factors, called hygiene factors such as working conditions, salary, and supervision are presented as capable of producing dissatisfaction but not motivation. These factors develop from the lower order human drives that seek merely to avoid pain from the environment. Thus, job satisfaction and dissatisfaction are not opposites, but different affective states resulting from different employment factors. In later explanatory writings, Herzberg (1968) describes stimuli for growth needs found specifically within the job as "intrinsic" factors. Those factors that provide only dissatisfaction are found outside the job, in the job environment, and are "extrinsic" factors.

Following on this pioneering work in motivational theory, Hackman and Oldham (1976) have added two important dimensions to the theory. They are the ideas of individual differences with respect to job responses and quantification with respect to both the motivational potential of a particular job and the growth needs of the individual performing that job. The result has been the development of a theoretical framework that sets out core job dimensions, resulting psychological states, and personal as well as work outcomes in a sequential, causal relationship as moderated by individual growth needs. This study utilized the specific theoretical framework called the Job Characteristics Model (Hackman & Oldham, 1976) and the attendant measurement tool called the Job Diagnostic Survey (JDS), also by Hackman and Oldham (1976; 1980). According to the authors:

The model proposes to specify the conditions under which individuals will become internally motivated to perform effectively on their jobs. The model focusses on the interaction among three classes of variables: (a) the psychological states of employees that must be present for internally motivated work behavior to develop; (b) the job dimensions that can create these psychological states; and (c) the attributes of individuals that determine how positively a person will respond to a complex and challenging job.... (1976, p. 250). The model is an attempt to extend, refine, and systematize the relationships between job characteristics and individual responses to the work.... At the most general level, five Core Job Dimensions are seen as prompting three Critical Psychological States which, in turn, lead to a number of Personal and Work Outcomes. The links between the Core Job Dimensions and the Critical Psychological States, and between the Critical Psychological States and Personal and Work Outcomes are shown as moderated by Individual Growth Need Strength (GNS). (1976, p. 255).

Figure 1 presents the Job Characteristics Model. Each of the major classes of variable in the model has been described by Hackman and Oldham (1976, pp. 255-261) and is presented below. The first class of variable is that of the Core Job Dimensions. These are the independent variables of the model. These dimensions refer to the five essential attributes of a job that are responsible for fostering the development of the Critical Psychological States.



Figure 1. Job Characteristics Model (Hackman and Oldham, 1976).

Three of the job dimensions contribute to the experienced meaningfulness of the job:

1. Skill Variety. The degree to which a job requires a variety of different activities in carrying out the work, which involve the use of a number of different skills and talents of a person.... (p. 257)

2. Task Identity. The degree to which a job requires a completion of a "whole" and identifiable piece of work; that is, doing a job from beginning to end with a visible outcome.... (p. 257)

3. Task Significance. The degree to which the job has a substantial impact on the lives or work of other people, whether in the

immediate organization or in the external environment. (p. 257)

The next Core Job Dimension of autonomy contributes toward experienced responsibility on the job:

4. Autonomy. The degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and

in determining the procedures to be used in carrying it out. (p. 258)

The last core job dimension of feedback contributes toward a knowledge of results about the job:

5. Feedback From the Job Itself. The degree to which carrying out the work activities required by the job results in the employee obtaining direct and clear information about the effectiveness of his or her performance. (p. 258)

The second class of variable is the Critical Psychological States. These refer to the positive effects experienced by an individual "when [she] he <u>learns</u> (knowledge of results) that [she] he <u>personally</u> (experienced responsibility) has performed well on a task that [she] he <u>cares about</u> (experienced meaningfulness)" (p. 255-6). Specific definitions of the three Critical Psychological States are:

1. Experienced Meaningfulness of the Work. The degree to which the individual experiences the job as one which is generally meaningful, valuable, and worthwhile.

2. Experienced Responsibility for Work Outcomes. The degree to which the individual feels personally accountable and responsible for the results of the work he or she does.

3. Knowledge of Results. The degree to which the individual knows and understands, on a continuous basis, how effectively he or she is performing the job. (pp. 256-7)

For purposes of clarity, the Critical Psychological States will be termed intermediate variables to recognize the linking relationship identified by the authors between these states and other variables. This clarification helps the reader to more clearly understand the conceptualization of these variables, the mediating variable and the independent and dependent variables.

The third class of variable in this model is that of the attribute of an individual that determines the response to a challenging job. This attribute is termed Growth Need Strength (GNS). It is a conceptualization and measures the differences among people with respect to how they moderate their reactions toward work. The prediction is that people who have high need for personal growth and development will respond more positively to a job that is rich in motivation than people with low growth need strength. This variable of GNS is posited to be the linking variable between job dimensions and job outcomes. As such, it is specifically termed a mediating variable.

The final group of variables presented in the Job Characteristics Model is that of Personal and Work Outcomes. They are the dependent variables of the model. The Outcome variables include high internal work motivation, high quality work performance, high satisfaction with the work, and low absenteeism and turnover. These are predicted to be responsive to the interaction among the three major classes of variable.

The attendant measurement tool to the Job Characteristics Model is the Job Diagnostic Survey (Hackman & Oldham, 1980) designed to tap the major classes of variable in the theoretical model. Two outcome variables (i.e., work performance and absenteeism/turnover) are not assessed by the JDS. These variables were deemed by the authors to be "idiosyncratic to particular work settings" and as such not useful for intended widespread application (Hackman and Oldham, 1980, p.103).

Purpose of the Study

This study was designed to address the following specific questions:

1. How do nurses perceive job characteristics and job satisfactions?

2. What is the relationship between job design variables and job satisfaction for hospital-employed nurses as measured by scores on the Job Diagnostic Survey?

3. What is the relationship between job satisfaction as measured by scores on the Job Diagnostic Survey and selected personal and professional characteristics of hospital-employed nurses?

Definition of Terms

<u>General Job Satisfaction</u>: The sum of job facet satisfaction across all facets of a job (Wanous & Lawler, 1972) and measured by the score of general job satisfaction on the JDS.

<u>Specific or Context Job Satisfaction</u>: Evaluation of a contextual aspect of one's job as distinct from the job itself. Examples include job security, pay, co-workers, and supervision. The satisfaction score arising from individual contextual aspects of the job as measured by the JDS.

Job Design Variables: Essential or core attributes of a job. These dimensions include skill variety, task identity, task significance, autonomy, feedback from the job itself, feedback from others, and dealing with others (Hackman & Oldham, 1976).

Selected Personal and Professional Characteristics of the Nurse: Characteristics

include educational preparation, length of nursing experience in years, maturity in age, employment tenure, area of practice, and pattern of nursing care delivery.

<u>Hospital-Employed Nurse</u>: A registered nurse who is currently employed in a full-time staff position in an acute care hospital in British Columbia.

Limitations

Limitations which can affect the generalizeability of this study are presented by identifying those factors which may be influential upon reports of job satisfaction. Variables which may affect attitudes, such as life situations of the registered nurses, are not considered. Participation in the study was voluntary on a self-selection basis. Particular organizational practices or organizational philosophies that may be present in the participating hospitals are not considered. Although hospitals were chosen in part due to their differing sizes with respect to full-time staff complements, it is not clear whether this factor influences the attitudes of the nurses.

Significance of the Study

The majority of nurses practise their profession within the hospital setting. There is a demonstrated lack of job satisfaction with respect to nursing jobs in general with the greatest dissatisfaction reported by hospital-employed nurses.

This study examines job satisfaction of the hospital-employed nurse by focussing on the design of the job itself through the work of Hackman and Oldham (1976). Through the perception of the jobholder, the various aspects of work design are assessed with the use of a standardized measurement tool. This study will provide a useful addition to the small number of studies that

+

¥

relate specifically to the Canadian experience. The knowledge obtained will be useful in identifying those job design factors which may be significantly related to the satisfaction or lack of satisfaction that nurses experience from their jobs. The identification of these factors could be the first step in redesigning the job of nursing so that the structure itself would promote job satisfaction.

Chapter Two

Literature Review

The literature is reviewed in three sections: first, a discussion of the meaning and measurement of job satisfaction; second, identification of components of job satisfaction and finally, personal and professional factors and job satisfaction.

Meaning and Measurement of Job Satisfaction

The idea of job satisfaction as an important psychological construct originated in the 1930s, but despite considerable attention from researchers in the subsequent 50 years, little definitive understanding has been achieved. The great number of definitions, both general and operational, and the absence of consensus throughout the literature attest to this fact. Analysts such as Wanous and Lawler (1972) have identified both conceptual and methodological difficulties with respect to job satisfaction. They point out that job satisfaction has been used as both an independent and a dependent variable. No fewer than nine definitions of job satisfaction and measuring formulae containing various components have been identified. Other comprehensive reviews (Hale, 1986; Larsen, Lee, Brown, & Shorr, 1984; Locke, 1976) arrive at essentially the same conclusions, that is, there is confusion about the nature of job satisfaction and what job satisfaction scales are actually measuring.

Definitions of job satisfaction are usually found grouped according to the theoretical models attempting to explain the construct. These theories are based on human need, expectancies, values, or some combination thereof (Locke, 1976). Early definitions of job satisfaction centred around basic human needs.

Herzberg (1966) defined job satisfaction as occurring when an individual's needs and job characteristics are compatible. Similarly, Betz (1969) defined satisfaction as the correspondence between individual needs and job reinforcers. Other definitions have expanded the human need concept to include such acquired entities as values and expectations. Hence, job satisfaction has been variously defined as feelings or emotional response toward one's job, a job which sufficiently fulfills expectations, needs, and values (Juhl, 1985); the fit between individuals and the jobs they perform (Guthrie, Mauer, Zawacki, & Cougar, 1985); the affective orientation on the part of an individual toward the work role (Vroom, 1964); and the alignment between personal roles of individuals and occupational roles of employees (Culbert & McDonough, 1980).

Review of the measurement of job satisfaction reveals that there are two types of measurement and two approaches to that measurement. Those investigators who view job satisfaction as a unidimensional variable tend to measure the variable with the use of one global score. This is referred to as global satisfaction. An example of this type of measurement is the scale developed by Brayfield and Rothe (1951). Those investigators, favoring a multidimensional view of job satisfaction, utilize a multidimensional scale relating to various facets or parts of the job. A popular example of this type of measurement is the Minnesota Satisfaction Questionnaire (Weiss, Dawis, England, & Lofquist, 1967). Twenty subscales of job satisfaction are measured and include such items as independence, supervision-human relations, abilityutilization, working conditions, recognition, and security.

The approaches to measuring job satisfaction have been either direct or indirect. The direct form of measurement is the self-report. Respondents are asked to indicate and/or rank their affective responses to their work. The typical format is the survey wherein fixed response questionnaires are used (Hale, 1986; Hart, 1988). The notion of the correspondence between personal factors and work factors to achieve job satisfaction has been open to possible method bias. Critics like Parkes (1982) point to lack of independence when the same individuals judge both the correspondence and the satisfaction. However, the work of Tziner (1983) has overcome this methodological concern. Using the Minnesota group's measurement tools, Tziner studied two groups of social workers. The first group identified individual needs with respect to their job. The second group identified the occupational reward structure of their job as well as their levels of job satisfaction with the job in general and the various facets of the job. Using canonical correlation in analyzing the stated needs of one group and the stated rewards of the other, Tziner demonstrated support for the hypothesis that work satisfaction and correspondence between occupational rewards and needs are strongly related.

The indirect form of measurement consists of focussing on those variables that are assumed to be the outcomes of job satisfaction or lack thereof. Typical outcome variables are assumed to be turnover, absenteeism, and performance. In a review of 31 empirical studies that employed indirect measures, Vroom (1964) exposed a picture wherein turnover was negatively related to job satisfaction, absenteeism related only weakly, and performance not at all. Recent studies tend to confirm these findings with respect to turnover (Huey & Hartley, 1988; McShane, 1985; Seybolt, Pavett, & Walker 1978; Simpson, 1984). One study by Lemler and Leach (1986) found no differences between leavers and stayers based on one general job satisfaction score. With respect to performance, two investigators (Parkes, 1982; Seybolt, 1986) demonstrated differences in work performance based on reports of job satisfaction.

Components of Job Satisfaction

Attempts to identify the possible components of job satisfaction have used a number of different approaches. Some focus on the identification of those components associated with job satisfaction or dissatisfaction. Godfrey (1978) surveyed the readers of Nursing 77 and reviewed the responses of 17,000 nurses. The findings indicated that job satisfaction was associated with opportunities for professional growth such as challenging work, the authority to carry out that work, recognition and feedback, and support from nursing administration. In a similar investigation a decade later, Huey and Hartley (1988) surveyed nurses with a modified version of Wandelt's questionnaire regarding conditions associated with RN employment. Responses from 3500 nurses, of whom 78% were staff nurses, identified the most frequently cited components of job satisfaction to be the presence of a competent registered nurse (RN) staff and the authority to exercise nursing judgement in patient care. In those cases where job satisfaction was lacking, the survey respondents identified the lack of a competent nursing staff and the lack of authority to exercise nursing judgement as the foremost factors. Sanger, Richardson, and Larson (1985) developed a list of eight potential job satisfiers from an established job satisfaction questionnaire. Those potential satisfiers included workload, accomplishment, relationships with the head nurse, relationships with nursing administration, relationships with physicians, decision-making, recognition, and utilization of knowledge and skills. Seven of the eight potential satisfiers were significantly related to job satisfaction scores. One item, that of relationships with physicians, was not statistically significant. In a comprehensive review of pertinent literature carried out for the Canadian Hospital Association, Jenny (1982) found that those factors frequently cited as contributing to job satisfaction could be grouped into the three categories of personnel policies, organizational climate, and nursing roles and functions. The recommendations relating to job satisfaction that were identified by Jenny included increasing recognition for the importance and value of nursing care in the hospital system and increasing organizational decision-making by nurses as it impacts on patient care.

Other investigators have identified job satisfaction components from theory. Herzberg (1966) used motivation theory to develop a list of components for satisfaction that were closely associated with the work itself. They were named intrinsic factors and included achievement, recognition, the work itself, responsibility, and advancement. Other components which reflected the environment were named extrinsic factors and included company policy and administration, supervision, salary, relationship with co-workers, and work conditions. Those studies drawing on Herzberg's arrangement of factors consistently demonstrate the significant relationship between the presence of intrinsic factors and job satisfaction (Seybolt, Pavett, & Walker 1978; Simpson, 1985; Sleightholm Cairns & Cragg, 1987)

Working from socio-tech systems theory, Cummings (cited in Huse & Cummings, 1985) theorized that job satisfiers could be dichotomized into social needs which refer to the need for significant social relationships, and growth needs which pertain to the desire for personal learning and accomplishment. To the degree that one's preferences and job factors matched, one could experience job satisfaction. In an industrial field experiment involving different manufacturing plants, Griffin (1983) used a control group and three experimental

groups to demonstrate that growth need factors were more influential to both job satisfaction and productivity than the social need factors.

Rank-ordering of job satisfiers and/or dissatisfiers has been used by some investigators wishing to identify the most salient components of job satisfaction or job dissatisfaction. In a study of worker preference for different job characteristics, 65 managers and non-managers reported on their preferences. Trade-off analysis was employed to yield significant support for the preference by workers for feedback and autonomy more than variety and identity (Griffin & Chonko, 1977).

Some investigators have used statistical analysis such as factor analysis or multiple regression analysis to arrive at an ordering of components. Prescott and Bowen (1987), for example, studied staff nurses' job reactions and employment behaviors in 90 care units from 15 hospitals in six different geographical regions. Data collected by means of questionnaires and interviews from more than a thousand nurses yielded rank orderings of reasons for staying in the job or leaving the job. Inflexible scheduling and insufficient administrative support were named as the most important and frequent reasons Stayers named primary reasons as the feeling of belongingness for leaving. within the organization and supportive relationships with administrators and coworkers. The attempt by Wandelt, Pierce, and Widdowson (1981) to identify factors associated with nurse unemployment yielded a rank-order of 10 factors of dissatisfaction that included inadequate salaries, excessive paperwork, inadequate administrative support, and insufficient opportunity for continuing These investigators further found that, of all the factors that education. fostered dissatisfaction and contributed to withdrawal from employment, all but family responsibilities were directly related to employment conditions common to the hospital setting. With respect to factors related to satisfaction, the data from both satisfied and unsatisfied nurses pointed to two factors: support from nursing administration and clinical competence of nursing supervisors. Factor analysis, used in a study of 144 staff nurses from four hospitals, identified four factors that were held to be critical to job satisfaction (Everly & Falcione, 1976). Those factors were relationships with co-workers and supervisors, the chance to develop and use new skills, opportunities for advancement, and recognition for one's contribution to the organization.

As the search narrows for specific variables that may be related to job satisfaction, increasing interest is being focussed on the job itself. A study, reported by Parkes (1982), of the effects of variations in work design on student nurses supported the idea that variations such as type of nursing care are causally related to both job satisfaction and performance. The connection between intrinsic factors of the job and quality of performance was also demonstrated in a two-year study evaluating quality of patient care (Eichorn & Frevert, 1979). Here, researchers attributed significant improvements found within certain clinical areas to the increased responsibility and accountability of Similarly, in an experimental study by Brooten et al. (1986), the nursing job. support was found for the link between autonomy in nursing practice and quality of nursing care. With the support of nurse practitioners, very-lowbirth-weight infants were able to be discharged from the hospital an average of 11 days earlier and at a weight 200 grams lighter than their control counterparts.

Some nurse researchers such as Simpson (1984) have focussed on the specific relationship between job design factors and satisfaction with hospital nursing practice. She compared perceptions of nurses with respect to the job

design factors of responsibility, authority, and delegation to their reports of job satisfaction as measured by the Minnesota Satisfaction Questionnaire. She reported that those staff nurses who obtained the higher responsibility scores also reported the highest job satisfaction scores, the lowest turnover rates, and one of the lower absenteeism rates.

Personal and Professional Factors and Job Satisfaction

The relationship between personal and professional factors and job satisfaction has yet to be established or explicated. The literature reflects both contradiction and inconclusiveness. Personal and professional factors have included such items as level of education, age, tenure, employment position, shift worked, nursing experience, gender, socioeconomic status, and self-esteem. For example, Sanger, Richardson and Larson (1985) looked at age, employment position, tenure, and shift with respect to job satisfaction for 32 staff nurses. Sixteen of the nurses worked on one psychiatric unit where the annual turnover was 10.8%. The remaining 16 worked on another psychiatric unit within the same hospital where the turnover rate was 38.4 percent. Philosophy and patient population were similar. The results supported a relationship between reported job satisfaction as measured by an eight-item job facet tool and turnover However, multiple regression analysis failed to predict job behavior. satisfaction scores from any of the personal factors. Step-wise regression analysis identified no relationship except for gender, with men reporting more job satisfaction than women. This finding with respect to gender coincides with that of a similar study by Simpson (1985) of 497 staff nurses from five Job satisfaction scores were generated in addition to information hospitals. about personal and professional factors. Men were found to be more satisfied than women with their jobs. A slightly negative correlation was demonstrated

between area of practice and job satisfaction, and a slightly positive correlation between years of nursing experience and job satisfaction. No relationship was found with regard to marital status, job classification, or level of education. Approaching job satisfaction as a function of personality, Hart (1988) focussed on operating room nurses, but failed to demonstrate any relationship between the personal and professional factors of age, education, tenure, and nursing experience and levels of reported job satisfaction. Similar results are reported by Sarata (1977), Lemler and Leach (1986), and Larson, Lee, Brown, and Shorr (1984).

Other studies have identified significant relationships between various personal and professional factors and reported levels of job satisfaction. In a survey of more than 2500 registered nurses that related levels of job satisfaction and dissatisfaction to three types of educational preparation, the findings suggest a direct and indirect relationship between satisfaction with nursing and type of educational preparation (Registered Nurses Association of British Columbia, 1988). The mixed findings with respect to educational preparation and job satisfaction suggest that this relationship has not been fully explored. It is possible that more highly educated nurses would report lower levels of job satisfaction based on different (higher) job expectations. It is equally possible that more highly educated nurses could be more satisfied with the job given that these nurses presumably have a greater number of coping strategies with which to derive satisfaction from a given job.

In a descriptive and correlational study, McShane (1985) examined how employed nurses changed their reports of satisfaction with particular job characteristics as more time was spent in the job. Specifically, the level of satisfaction increased with the age of the respondent. Similarly, satisfaction with the job was found to be significantly related to employment tenure. Curvilinear patterns of job satisfaction were found based on years spent in nursing. Responding to job facets of co-workers, work schedules, supervision, pay, and promotion, nurses indicated a high level of job satisfaction upon entry into nursing followed by a rapid decline, a brief rebound at the fifth year followed by another decline lasting until about the tenth year. From the tenth to the twentieth year, nurses indicated continuously growing levels of satisfaction. Seybolt (1986) divided 647 staff nurses from one hospital into groups according to tenure and surveyed for levels of job satisfaction using the specific job design variables of Hackman and Oldham (1980). Different job design variables were demonstrated to be more or less important to job satisfaction depending on length of nursing experience and employment tenure. For example, for new entrants (tenure 3 to 6 months), the critical factor in job satisfaction was feedback. For early career nurses (6 months to 1 year), performance-outcome links were critical. Those in mid-career (1 to 3 years) indicated the two most important factors were autonomy and role clarity. Advanced career nurses (3 to 6 years) desired task significance and job feedback, and later career nurses (over 6 years) preferred supervisory feedback and role agreement.

Summary

In this chapter, literature pertinent to job satisfaction in general and job satisfaction with respect to nursing has been reviewed. The numerous definitions of job satisfaction are a significant indication that this construct is still in the formulation stage.

Given the number of competing definitions, it is not surprising to find in the literature many and varied measurements of job satisfaction. Any

comparison among job satisfaction measurements is difficult since there has been little consistency in the employment of such measures. Broadly speaking, measurement tools can be classified into two categories according to their scoring arrangements. They are those that produce one general score (denoted as global satisfaction) and those that produce separate scores of specific facets of the job (denoted as job facet satisfaction) which can then be aggregated to a global score of job satisfaction.

Approaches to measurement include the direct approach whereby respondents report their affective attitudes toward their jobs and the indirect approach whereby job satisfaction is interpolated from related employment behaviors such as turnover, absenteeism, and work performance.

Components of job satisfaction and dissatisfaction identified from studies appear to be wide-ranging and varied. However, certain themes can be developed based on the frequency with which various components have been empirically associated with either satisfaction or dissatisfaction. Those components frequently cited by nurses in relation to job satisfaction have to do with opportunities for professional growth such as challenging work, the authority to carry out that work, recognition, feedback, and support from nursing administration. Those components connected with dissatisfaction relate to the absence of the above satisfiers and/or the presence of such working conditions as inadequate staffing and inflexible scheduling.

Personal and professional factors contributing to job satisfaction have yet to be established or explicated. The empirical evidence is mixed and inconclusive. Whereas the majority of studies have failed to identify a relationship between any personal and professional factors and job satisfaction, a few have focussed specifically on professional factors of nursing experience and employment tenure vis-a-vis job satisfaction and have demonstrated significant correlations.

Based on the literature review, this proposed study offers a number of possible advancements in the exploration of job satisfaction among hospitalemployed nurses. First, the Job Characteristics Model by Hackman and Oldham (1976) provides a theoretical formulation that envelops the significant issues held within the construct of job satisfaction, that is, the components of job satisfaction and the relationship between person and job as moderated by individual needs and preferences.

Second, some of the weaknesses related to the measurement of job satisfaction can be addressed by using Hackman and Oldham's measurement tool, the JDS (1980). The use of this device makes it possible to directly measure the theorized variables of the model. Further, the tool has been standardized and offers normative data against which to compare reported scores of job satisfaction.

Finally, the Job Characteristics Model together with the JDS form a connection between the conceptual and practical aspects of job satisfaction. It is anticipated that by focussing on job design variables and personal and professional needs and preferences, the proposed study will provide data that might be useful to managers and administrators in designing jobs that increase job satisfaction for hospital-employed nurses.

Chapter Three

Methodology

For this descriptive study, a survey approach utilizing a structured questionnaire was used.

Instruments

Two instruments were used in this study: (1) the Job Diagnostic Survey by Hackman and Oldham (1980) and (2) a Nurse Characteristics Questionnaire developed by the investigator.

Job Diagnostic Survey

The Job Diagnostic Survey (JDS) is a data collection instrument that provides measures of 21 variables relating to: (a) objective job dimensions (independent variables), (b) individual psychological states resulting from these dimensions (intermediate variables), (c) affective reactions of employees to the job and work setting (dependent variables), and (d) individual growth need strength (mediating variable) that is interpreted as the readiness of individuals to respond to "enriched" or challenging jobs (Hackman & Oldham, 1975). This tool was constructed by Hackman and Oldham to tap each major class of variable in the theory of work motivation presented in the Job Characteristics Model. Further, two measures were added to the measurement tool (Hackman & Oldham, 1980) which are supplementary to the Core Job Dimension of feedback. The supplementary measures are:

Feedback from Agents. The degree to which the employee receives clear information about her/his performance from supervisors or from co-workers (p. 105).

Dealing with Others. The degree to which the job requires the employee to work closely with other people in carrying out the work activities (p. 105).

Table 1 lists the 21 specific measures obtained from the JDS.

Table 1

Specific Measures of the Job Diagnostic Survey

CORE JOB DIMENSIONS

Skill Variety Task Identity Task Significance Autonomy Feedback from Job Feedback from Agents Feedback from Others

CRITICAL PSYCHOLOGICAL STATES

Experienced Meaningfulness of Work Experienced Responsibility for Work Outcomes Knowledge of Results

AFFECTIVE OUTCOMES

General Satisfaction Growth Satisfaction Internal Work Motivation

CONTEXT SATISFACTIONS

Job Security Pay Co-workers Supervision

INDIVIDUAL GROWTH NEED STRENGTH (GNS)

MOTIVATION POTENTIAL SCORE (MPS) Hackman and Oldham (1980, p. 105). Hackman and Oldham (1975) state that each class of variable except the Context Satisfactions is measured in two different sections of the JDS and by items written in two different formats. This has been done to decrease the degree to which the JDS results are method specific. However, it is not necessary to separate Context Satisfactions from other satisfactions (those Hackman & Oldham term Affective Outcomes) for any other reason. Therefore, to promote ease of discussion, particularly discussion related to the findings of the JDS, the satisfactions will be grouped together under the title of Job Satisfactions. The questionnaire is comprised of 83 items for which there are seven-point scales throughout (1 = low, 7 = high). The overall motivating potential score (MPS) of a job ranges from 1 to 343. (See Appendix A for the complete questionnaire).

Psychometric properties of the JDS.

The JDS was developed over a two year period that took in both testing and revision. Empirical testing involved application with over 1500 individuals working in more that 100 jobs in approximately 15 organizations. Upon publication of the JDS in 1975, the authors provided these comments:

Each of the scales as measured by the JDS have internal consistency reliabilities that range from a high of .88 (growth need strength in the "would like" format to a low of .58 (task identity and dealing with others). In general, the results suggest that both the internal consistency reliability of the scales and the discriminant validity of the items are satisfactory. (p.164)

Additional empirical testing of the JDS that involved 6930 employees in 876 jobs from 56 organizations resulted in similar reports on psychometric properties of the instrument. Further, based on these JDS scores, normative data for several job families were generated (Oldham, Hackman, & Stepina, 1979).

Based on the extensive testing of the JDS by themselves and other researchers, Hackman and Oldham (1980) noted the following cautions in its use:

The job characteristics are not independent of one another. It may be that most "good" jobs are good in many ways and jobs that are poorly designed tend to be low on most or all of the job characteristics.... The validity of some JDS scales remains unestablished.... (p.313) The context satisfactions are tapped by relatively few items and are intended to provide only a quick check of how satisfied people are with selected aspects of the work environment. The concept of growth need strength is key in the theory of work motivation underlying JDS, and many items are devoted to the assessment. At present, however, evidence regarding the validity of growth need strength is scattered and inconsistent. (p. 314)

Nurse Characteristics Questionnaire

The Nurse Characteristics Questionnaire was developed to identify selected personal and professional factors related to the participants. The information sought was: (1) educational level, (2) length of experience in nursing, (3) age, (4) employment tenure, (5) area of clinical practice, and (6) type of nursing care delivery. (See Appendix B for a copy of the Questionnaire).

<u>Sample</u>

The population from which the sample was drawn was registered nurses (RNs) employed on a full-time basis as staff nurses in British Columbia acute care hospitals. The sample consisted of RNs drawn from three acute care hospitals in British Columbia. Hospitals chosen for the study had the following
characteristics: (1) Directors of Nursing were interested in participating and granted permission for the study; (2) each hospital was located in a different geographical region of the province including both metropolitan and non-metropolitan locations; (3) the size of full-time staff RN work forces varied among the hospitals. Registered nurse participation in the study within each hospital was voluntary. Table 2 presents the number of subjects in relation to the total number of full-time (FT) RNs employed at each hospital.

Table 2

Number of	Subjects and	Total Full-time	e RNs by Hospital
Hospital	No. RNs	No. Subjects	% Total FT RNs
1	38	20	52.63
2	59	16	27.12
3	134	65	48.51

Data Collection Procedure

Based on the desired characteristics of the study sample, the investigator identified three hospitals within British Columbia that would be suitable for the study. The Director of Nursing in each of the identified hospitals was reputed to be open to the possibility of nursing research being conducted in her/his hospital. In each case, the Director of Nursing was contacted by the investigator through a letter of explanation regarding the proposed study (See Appendix C). Permission was then granted to conduct the study by each Director of Nursing. No other hospitals were identified or approached. At each of the hospitals, Directors arranged a meeting wherein the investigator met with Head Nurses to explain the purpose and the nature of the study and to secure their support. At all hospitals, plans were made for the investigator to personally administer and immediately collect the completed instruments. The investigator spent two days at each hospital collecting data. Those days were consecutive in the cases of hospitals 1 and 3, and separate in the case of hospital 2. In the case of hospital 2, because of the nature of staff rotation, it was felt that separate days would yield a greater number of nurses who would be available for possible participation in the study. In each of the hospitals a list of possible appointments, that anticipated the scheduling and work constraints of the nurses, was drawn up and posted on clinical units. Nurses could review the available times for participating in the study and make their arrangements accordingly.

A central meeting room was reserved for the purpose of data collection and nurses arrived and completed the instruments at a time that was convenient to them. Throughout each two-day collection period, hospital 1 provided 11 possible appointment times, hospital 2, 22 times, and hospital 3, 14 times. In all cases, nurses were encouraged to participate on paid time, although some nurses chose to participate either before or after they were scheduled for work. In some cases, nurses came to the hospital on their day off in order to participate in the study. Hospital 2 provided for overtime payment to the nurses if participation in the study would result in staying after the normal shift hours. The number of nurses completing the instruments at any one time ranged from one to six. A total of 101 sets of instruments was distributed. Ninety-six responses were usable (four instruments were not returned and one was returned incomplete). The data were coded and keypunched for computer analysis.

Data Analysis

All data were analyzed using the computer program Statistical Package for the Social Sciences (SPSS/PC+ version 2.0). Prior to specific data analysis, oneway analysis of variance was carried out to determine if there were significant differences among the subgroups of the sample with respect to data from the JDS and data from the Nurse Characteristics Questionnaire.

Descriptive statistics applied to the JDS data from the study sample focussed on means and standard deviations. Differences between the means of the study sample data and the normative data were analyzed with the use of the \underline{Z} test. A two-tailed test was used to determine significance at the .05 level.

Pearson's correlation coefficient was used in two ways to examine the relationships among the variables that are set out in the JDS and derived from the Job Characteristics Model (Hackman & Oldham, 1976). First, the correlation coefficient was compared to the standard significance table values to determine if the correlation coefficients were statistically significant (Hopkins & Glass, 1978). That is, whether the coefficient, given the sample size, was large enough to reject the null hypothesis that the population correlation coefficient was zero. Those coefficients which were statistically different from zero were then examined in a second stage to determine their strength.

According to Devore and Peck (1986), r-values that are between zero and 0.5 can be characterized as weak; between 0.5 and 0.8 moderate; and between 0.8 and 1.0 strong. However, for the purposes of behavioral study, an r-value of 0.40 or greater has been found to be useful for predictive instruments

(Guilford & Fruchter, 1973). Although statisticians rightly caution against imposing causality on any correlation (Hopkins & Glass, 1978), the strength or degree of association can be of assistance in considering the correlation itself, in focussing more closely on particular variables, and in directing further examination of those variables.

Descriptive statistics applied to the nurse characteristics data included mean, median, range, and standard deviation. The chi-square was used to determine associations between personal and professional characteristics of the nurse and job satisfaction as measured by the JDS. A p value of <.05 was considered to be statistically significant for all tests.

Human Rights Protection

The matter of protection of human rights was addressed by several mechanisms. First, the mechanisms for protection of human rights were approved by the University of British Columbia Behavioural Sciences Screening Committee for Research and Other Studies Involving Human Subjects. Second, approval for the study was granted by the participating hospitals through the respective Directors of Nursing. Third, all potential participants were provided with letters that addressed issues of informed consent, confidentiality, and access to further information (See Appendixes D and E). Last, immediately prior to the completion of the study instruments, all participants were reminded of the voluntary nature of participation and assured of confidentiality with respect to any information provided.

Chapter Four

Findings and Discussion

The findings of this study are presented in three sections. The first section provides a description of the total sample and the subgroups from the three hospitals. The second section sets out the results of the descriptive analysis of the Job Diagnostic Survey (JDS) and the results of the correlational analysis of job design variables and job satisfaction. The third section details the results of analysis of selected personal and professional characteristics of the nurse and job satisfaction as measured by the JDS.

Description of the Total Sample and Sample Subgroups

A total of 101 sets of instruments was distributed to full-time employed registered nurses from three acute care hospitals in British Columbia. Four instruments were not returned and one was returned incomplete. The 96 completed instruments were used for data analysis. The three subgroups were composed of 20 instruments completed by nurses in Hospital 1, 16 by nurses in Hospital 2, and 60 by nurses in Hospital 3. Based on the total number of full-time nurses who could have completed a set of instruments, the return rates of usable instruments were 53%, 27%, and 45%, respectively. One-way analysis of variance (ANOVA) was carried out to determine if there were significant differences between the subgroups. Results indicated that for five of the selected personal and professional nurse characteristics (length of experience in nursing, age, employment tenure, area of clinical practice, and type of nursing care delivery) the subgroups were not significantly different. For the remaining characteristic of educational preparation, results indicated a difference at the

.05 level of significance. Thus, with the exception of the characteristic of educational preparation, the subgroups were combined for reporting purposes.

Nurse Characteristics Questionnaire

Educational preparation.

The educational preparation of nurses by sample subgroups (Hospital 1, 2, and 3) is presented in Figure 2. The predominant educational qualification for respondents from Hospital 1 was that of a diploma plus one or more post-basic courses (50%), for Hospital 2, a diploma plus one or more university courses (38%), and for Hospital 3, a generic baccalaureate degree (38%). Ten percent of the respondents from Hospital 1 held a diploma only as their highest level of education, while among respondents from Hospitals 2 and 3, no one reported a diploma only as the highest level of education. No respondents from any of the hospitals reported an education level beyond that of a baccalaureate degree.

The educational preparation for the entire sample of registered nurses is presented in Figure 3. Only 2% of the nurses reported a diploma as their highest educational level. Thirty-three percent had one or more post-basic courses that may or may not have had a formal certificate or diploma attached. Thirty percent had one or more university courses, 31% possessed a generic baccalaureate degree in nursing, and 3% possessed a post-R.N. baccalaureate degree in nursing.

The educational profile for this sample of staff nurses is very different from that of staff nurses in general in Canada (Statistics Canada, 1986). Consistent with traditional educational assessment practices, Statistics Canada (1986) reported that, of nurses employed in the position of staff/general duty nurse in Canada, 74% held a diploma, 17% held a post-basic diploma, 9% held a baccalaureate degree, and 0.3% held a graduate degree in nursing (p. 28). For



Figure 2. Educational preparation of nurses by hospital.

35



Figure 3. Educational preparation of nurses as a percentage of total sample.

the province of British Columbia, Statistics Canada (1986) reported a slightly different educational profile of general duty/staff nurses. Those who held a diploma as their highest level of education accounted for only 51% of the population. Forty percent held a post-basic diploma and 9% held a baccalaureate degree. From these statistics, British Columbia nurses appear to possess higher levels of education than do nurses generally in Canada, particularly in the area of post-basic courses.

There are two possible reasons for the observed discrepancy in educational profile between the study sample and the population of staff nurses in Canada as reported by Statistics Canada. The first reason has to do with the number of educational categories used to make up the educational profile of nurses and the criteria which are applied to circumscribe those categories. For example, Statistics Canada (1986) defines a post-basic course as one which carries with it a formal certificate or diploma (p.11). By applying the criterion of a certificate or diploma, those nurses who have participated in workshops, conferences, and courses for which there are no formal certificates or diplomas are excluded from identification. While these nurses may possess considerable knowledge and expertise resulting from participation in various educational experiences, traditional assessment methods fail to identify their presence for Similarly, traditional methods used to circumscribe statistical purposes. educational levels fail to identify or recognize university coursework completed by nurses unless the criterion of a university degree is fulfilled. Such assessment methods may be reflecting the historical experience of nurses where, until recently, most continuing education in nursing was typically non-credit in nature (Attridge and Gitterman, 1988). From the traditional assessment practices, Statistics Canada (1986) sets out six levels of education for nurses: diploma, post-RN diploma or certificate, basic baccalaureate degree, post-RN baccalaureate degree, and masters or higher degree.

This study departed from two of the traditional assessment methods. The first departure reflects a change in criterion for a particular educational category. Nurses were asked to identify any post-basic course that they had successfully completed rather than only those that offered a certificate or diploma. A second departure reflects a change in the number of educational categories. Nurses were asked to identify any university coursework that they had successfully undertaken, but that had not in itself resulted in a university degree. This new category was placed within the usual progressive hierarchy of educational categories between the category of diploma plus post-basic course(s)

and the category of basic baccalaureate degree.

Figure 4 illustrates the educational profile of staff nurses reported by Statistics Canada (1986) for Canada and for British Columbia and the educational profile of staff nurses in this study reported by this researcher. For ease in comparison, educational categories have been collapsed to three simple levels of diploma, diploma with education beyond a diploma but less than that of a university degree, and a university degree.

The most striking feature of the comparison is the difference between the percentage of nurses who held a university degree and those who did not. Both national and provincial statistics report degree-holding nurses to be in the 9% range. In this study sample, 34% held degrees, approximately four times that of the province or the country. In looking for possible explanations of the educational differences, one might speculate about the proximity of the sample hospitals and institutions of higher learning. However, only one of the hospitals was located near a university. In fact, in the sample, the largest group of degree-holding nurses was employed by the hospital which was furthest away from a university. This particular hospital was the smallest of the three, and it may be that degree-holding nurses find a better employment fit in a smaller hospital where a greater number of skills and abilities might be called upon within a particular job description.

The second reason for the obvious difference in educational profile of this sample as compared to the population of staff nurses in Canada may have to do with two aspects of the sample. The first aspect is sample selection. In this study, the sample was determined through self-selection rather than through representation or randomization. The second aspect of the sample is size,



Percent

Baccalaureate degree

R.N. diploma

Educational level between R.N. diploma and baccalaureate degree

*Source: Statistics Canada (1986).

particularly the sizes of two of the subsamples. Both were under 30 and, as such, are considered small.

Years of nursing experience.

Respondents were asked to report the total number of years that had been spent in nursing employment. The results indicate that the respondents had had nursing experience ranging from one to 34 years. The mean was 13 and the median 14. This proximity of mean and median indicates that years of experience were roughly symmetrically distributed among the respondents.

Age of respondents.

Consistent with the reported years of experience, most nurses in this sample indicated that they were in their middle years or older. Respondents were asked to report their age in one of nine age categories. Each category spanned four years and the combined categories ranged from 21 to 65 years. Figure 5 represents the age data from this study sample. The majority (60.4%) of the nurses were between the ages of 31 and 45. Only 18.8% of the nurses were 30 years of age or younger. Compared to national figures, this sample is almost identical. Statistics Canada (1986) reported that 63% of the nurses employed in Canada were between the ages of 31 and 44, and approximately 20% were 30 years of age or less.

Employment tenure.

The employment tenure of the registered nurses in this sample is presented in Figure 6. Employment periods have been categorized into five time frames: less than 6 months, from 6 months to 1 year, from more than 1 year up to 3 years, from more than 3 years up to 6 years, and more than 6 years. These categories follow those of Seybolt (1986). The employment category most frequently cited by the respondents of this study (46%) was that of more than 6



Figure 5. Age distribution of sample.



Figure 6. Employment tenure of sample.

41

years. While no national data exist with respect to nurse employment tenure patterns, the findings of this study are consistent with those reported by the Health Manpower Research Unit (1988) wherein 51.6% of British Columbia nurses were found to have stayed with their employer for 5 years or longer. The mean length of employment reported by the respondents in this study was between more than 3 years and up to 6 years with the median occurring within the same time frame.

Area of practice.

With respect to area of practice, 46% (n=44) of the entire sample indicated that they practised nursing in a medical-surgical area. Thirteen percent of the respondents practised in intensive care and 22% in the operating room. The remainder of the nurses were distributed among other areas: 6% in obstetrics, 6% in psychiatry, 5% in pediatrics, and 2% in "other" such as medical daycare.

Pattern of nursing care delivery.

The last characteristic used to describe this sample of nurses was the pattern of nursing care delivered. Nurses were asked to indicate whether the pattern of nursing care that they delivered was primary, team, modified primary or other. Approximately one third of the nurses (34%) indicated that they practised primary nursing. Another third (34%) indicated that they practised team nursing. The balance was made up by respondents who reported using a modified primary care nursing (25%) and a remaining few who reported using either functional nursing or provided personalized descriptions of nursing care. Operating room nurses, who constituted 22% of the sample, selected either team or functional nursing to describe their pattern of care delivery.

In summary, the characteristics of this sample of nurses, with the

exception of educational preparation, are not unlike those described in other studies and reports. In relation to national and provincial data, the nurses in this sample were of similar ages, had similar lengths of employment, and generated a typical picture of distribution with respect to area of practice. However, the educational level was reported to be higher than either the national or provincial norm.

Job Diagnostic Survey

The Job Diagnostic Survey (JDS) measures 21 job design variables relating to one's job and satisfaction with it. Each variable, except for the motivating potential score (MPS), has a possible score ranging from 1 to 7. The MPS is a multiplicative "grand score" of all independent variables, and thus ranges from 1 to 343. Developed to test the theoretical construct of the Job Characteristics Model (Hackman & Oldham, 1976), the JDS addresses the theorized independent, intermediate, mediating, and dependent variables. Findings of the JDS in this study will be presented according to these variables.

For all three subgroups of surveyed nurses, a one-way analysis of variance was carried out to determine if the subgroups were significantly different from one another with respect to the job design variables. The results indicate that the subgroups were not significantly different on 18 of the 21 measured variables. Subgroups were different with respect to the variables of skill variety, task significance, and autonomy. These are among the independent variables within one of the major classes of variables, the Core Job Dimensions. With respect to the intermediate, mediating, and dependent variables which represent other major classes of variables (Critical Psychological States, Growth Need Strength (GNS), and Job Satisfactions, respectively), one-way analysis of variance demonstrated no difference among the three subgroups of surveyed nurses.

Normative Data for the JDS

Normative data for all measures of the JDS (Oldham, Hackman, & Stepina, 1979) are the result of surveys of nearly 7000 respondents occupying over 800 jobs in 56 organizations. The job classification of professional/technical has been chosen from the normative data as representing professional nursing. The job classifications employed in the normative data are those identified by the U.S. Department of Labor, (1965). Examples of other occupational titles that are found in the professional/technical classification are engineers, physicians, and lawyers. The findings of this study have been compared to the normative data using the professional/technical job classification.

Table 3 presents the means and standard deviations on the 21 variables of the JDS for the study sample and the normative data together with the differences expressed in \underline{Z} scores. There are a number of initial impressions that arise from reviewing sample means and standard deviations. For example, the Core Job Dimensions of task significance and dealing with others were rated very highly by the nurse respondents with mean scores of 6.20 and 6.44, respectively. Moreover, all of the scores for these variables were tightly clustered around the mean. For example, in the case of dealing with others, the standard deviation was only 10 percent of the mean. Such a low coefficient of variation (Devore & Peck, 1986) suggests that there is a high degree of agreement among the nurse respondents in that their work is perceived as very important and involving extensive interaction with other people. Respondents

	Study Sam	ple	Norm C Prof/Te	roup	Difference
	n =	96	n = 72	2	
Independent Variables	Mean	SD	Mean	SD	<u>Z</u> -Score
Core Job Dimensions Skill Variety Task Identity Task Significance Autonomy Feedback Job Feedback Agents Dealing With Others	5.65 4.21 6.20 4.65 4.98 3.87 6.44	1.13 1.37 0.72 1.23 1.01 1.31 0.64	5.36 5.06 5.62 5.35 5.08 4.21 5.83	$1.00 \\ 1.16 \\ 0.95 \\ 1.05 \\ 1.11 \\ 1.37 \\ 0.96$	1.759* -4.335* 4.324* -3.961* -0.599 -1.618 4.663*
Intermediate Variables					
Critical Psychological States Meaning of Work Responsibility of Work Knowledge of Results	5.46 5.65 5.13	0.84 0.74 1.01	5.40 5.75 5.00	0.87 0.72 0.99	0.449 -0.878 0.835
Mediating Variable					
Growth Need Strength Would Like Need Growth Need Strength (GNS)	6.10 3.16 5.01	0.84 0.43 0.60	6.11 4.76 5.59	0.82 0.64 0.57	-0.077 -18.311* -6.365*
Dependent Variables					
Job Satisfactions General Satisfaction Internal Motivation Growth Satisfaction Satisfaction Security Satisfaction Pay Satisfaction Co-workers Satisfaction Supervision MPS	4.38 5.94 4.85 5.33 4.00 5.59 4.87 129.00	$\begin{array}{c} 1.11\\ 0.57\\ 1.16\\ 1.18\\ 1.66\\ 0.67\\ 1.16\\ 55.00 \end{array}$	$\begin{array}{r} 4.88\\ 5.77\\ 5.06\\ 4.96\\ 4.40\\ 5.48\\ 4.89\\ 154.00\end{array}$	0.99 0.65 1.09 1.16 1.51 0.85 1.29 55.00	-3.075* 1.767* -1.199 2.031* -1.262 1.199 -0.104 -2.809*

Table 3 Comparison of JDS Findings between Study Sample and Normative Group

also indicated more feedback from job tasks than feedback from the agents with whom they dealt in the performance of their jobs.

Of the dependent variables, the lowest scored variable, with a mean of 4.00, was pay satisfaction. This variable also exhibited the widest variation of opinion with a standard deviation of 1.66, and a coefficient of variation of 42 percent. Personal, internal motivation proved to be the strongest variable with a mean of 5.94 and the least variable of the factors, with a standard deviation of 0.57.

Sample Data for the JDS

Independent variables (Core Job Dimensions).

For three of the seven Core Job Dimensions, sample means for nurse respondents were significantly higher than those in the normative group. Those Core Job Dimensions were skill variety, task significance, and dealing with others.

Skill variety refers to the degree to which a job requires different activities in carrying out the work and calls for a variety of skills and talents on the part of the employee. Nurses in this study had a mean score ($\overline{x} = 5.65$) that was significantly higher than that of the professional/technical category of the normative data ($\overline{x} = 5.36$, $\underline{Z} = 1.76$) indicating a perception that nursing is rich in the number and variety of skills and talents that are required to do the job.

Task significance refers to the degree to which the job is perceived to have a substantial impact on the lives of others. Nurses in this study obtained a significantly higher mean score of 6.20 compared to the mean score of 5.62, $(\underline{Z} = 4.32)$ for the normative group. This implies a perception on the part of nurses that the work of the staff nurse is very important and carries with it

significant impact on other people's lives.

Dealing with others refers to the degree to which the job requires employees to work closely with other people in carrying out the work activities (including dealing with other organization members and with external organization "clients"). The mean score obtained by these nurses ($\bar{x} = 6.44$) was not only significantly higher than that for the normative group ($\bar{x} = 5.83$, Z= 4.66), but it also represented the highest mean score on any variable in the JDS. Nurses are apparently strongly and uniformly agreed that nursing is highly "people intensive."

For two of the Core Job Dimensions, sample means were significantly lower than those for the normative group. Those variables were task identity and autonomy.

Task identity refers to the degree to which the job allows or requires the completion of a whole or identifiable piece of work. For this variable, a \underline{Z} score of -4.34 was produced when the sample mean ($\bar{x} = 4.21$) and the normative mean $(\bar{x} = 5.06)$ were statistically compared. This finding is consistent with that of Joiner, Johnson, Chapman, and Corkrean (1982) wherein 160 registered nurses working as staff nurses in various hospital areas, and grouped in numbers similar to this study, obtained mean scores on task identity ranging from a low of 4.25 to a high of 5.04. The similar finding of this study may well be describing one of the central features of hospital nursing, that is, the nursing care of a hospitalized patient cannot be "completed" by one nurse. Patients require care 24 hours a day, seven days a week, and this necessitates a number of different nurses involving themselves in one patient's care. On a related issue of organizational planning, nurses traditionally have not been assigned a patient for the complete hospital stay. Even where primary nursing is practised, the primary nurse may care for the patient for the days s/he is scheduled for work (anywhere from 2 to 5 days), and then not be involved in that patient's care for an equal or greater number of days (usually 4 to 6 days if working extended hours and 2 to 4 days if traditional hours) when s/he is scheduled to be on days off. Under any nursing care delivery system, nurses tend to be responsible for the care of a given patient in a rather fragmented way, so it is reasonable that nurses may feel that the job does not allow for completion of a whole or identifiable piece of work.

Autonomy refers to the degree to which the job provides substantial freedom, independence, and discretion to the employee in scheduling the work and in determining the procedures to be used in carrying it out. For this Core Job Dimension, these nurses also obtained a sample mean ($\bar{x} = 4.65$) that was significantly lower than that of the normative group ($\overline{x} = 5.35$, $\underline{Z} = -3.96$). This finding suggests that the work of nursing as described by this sample of nurses is restrictive with respect to the amount of discretion or authority that is available to the nurse. The importance of autonomy and its statistically significant relationship to job satisfaction or lack thereof is widely reported in the literature (Godfrey, 1978; Griffin & Chonko, 1977; Huey & Hartley, 1988). The finding of low autonomy scores in this study is consistent with that reported by Joiner et al. (1982) wherein medical-surgical nurses scored significantly lower on the variable of autonomy than did nurses in specialty This point is germane to this study since 46% of the nurses in this areas. sample indicated that they practised in general medical-surgical areas.

The remaining Core Job Dimensions that make up the independent variables are feedback from the job itself and feedback from agents. Feedback from the job itself refers to the degree to which carrying out the work activities

1

required by the job results in the employee obtaining direct and clear information about the effectiveness of her or his performance. Feedback from agents refers to the degree to which the employee receives clear information about her or his job performance from supervisors or from co-workers. For these Core Job Dimensions, no statistical differences were found between the mean scores obtained by nurses in this sample and the mean scores of the professionals reported in the normative data. These findings suggest that nurses experience direct and indirect feedback similar to that of professional employees in general. These findings, together with the earlier finding that nurses reported experiencing significantly low levels of autonomy, suggest that the restricted autonomy may be arising from the structure of the job itself rather than the feedback or supervisory practices connected with the job.

Intermediate variables (Critical Psychological States).

Hackman and Oldham (1976) suggest that the three Critical Psychological States are necessary to the outcome of internal work motivation. Those States are experienced meaningfulness of the work (the degree to which the job is seen as important and worthy of one's skills according to a personal set of values), experienced responsibility (the degree to which one feels responsible and accountable for the work result), and knowledge of results (the degree to which a person receives timely and accurate information about the performance of the job). Comparing the mean scores obtained by nurses in the sample and professionals in the normative group, no differences among the psychological states approached significance. The \underline{Z} scores ranged from -0.878 to 0.835, indicating that the nurses in this study perceived that their jobs possessed the same import, responsibility, and knowledge of results as those of other professional employees.

Mediating variable (Growth Need Strength).

Postulated as a mediating variable between the core dimensions of a job and the satisfaction derived from that job, Growth Need Strength (GNS) can be described as the degree to which growth attributes are desired from a job, that is, the opportunity for personal accomplishment, learning, and self-development. The GNS scale is measured via two subscales of "would like" and "need." The "would like" format asks respondents to indicate how much they would like a particular quality in their job, for example, quick promotions, opportunities to learn new things, and friendly co-workers. The "need" format forces respondents to choose between low-growth and high-growth qualities, for example, a job where there is high-growth opportunity and little security or a job where there is little challenge with assured security. On the "would like" subscale, nurses in this sample obtained a mean score ($\bar{x} = 6.10$) that was statistically comparable to the mean score ($\bar{x} = 6.11$) of professional employees in the normative group. However, on the "need" subscale, the mean score of nurses ($\bar{x} = 3.16$) was significantly lower than that of the normative group ($\bar{x} = -$ 4.76, \underline{Z} = -18.31). The explanation for these results is not obvious. It may be that nurses are clear about the qualities they would like in a job, but that trade-off choices tend to generate an essentially conservative response. Although there are no data with respect to family income patterns among nurses, researchers such as Layton (1988) have reported on "the large number of single parents in nursing" (p.52). It is, therefore, reasonable to speculate that a number of nurses could be the primary income earners in their families. If this were the case, there would be little choice between security and other job qualities. Sociological factors may also be of some relevance. Researchers have found that it is the effects of marriage that account for lower aspirational

behavior among women in the labour force (Hoffman & Reed, 1981). These authors report that "marriage appears to increase promotion seeking behavior among highly motivated men and decrease it among highly motivated women" (p.200). Hoffman and Reed further found similar stronger effects resulting from parenthood. These findings would coincide with the experience of many married and parenting women who find that their jobs outside the home tend to occupy a position of perceived importance subordinate to that of the welfare of other family members.

When the scores of the two subscales, "would like" and "need" are combined to provide a score for GNS, nurses obtained a mean score ($\bar{x} = 5.01$) that was significantly lower than that of professionals ($\bar{x} = 5.59$, $\underline{Z} = -6.37$) in the normative group. This finding suggests that nurses express strong desires to learn and grow on the job. However, for reasons that can only be speculated upon, they appear unwilling to choose growth-rich jobs that feature independence, innovation, and individual challenge if they are at the expense of other job factors such as pay, security, or positive collegial relationships and arrangements.

Dependent variables (Job Satisfactions).

Job Satisfactions include the variables of general satisfaction with one's job, internal work motivation (the degree to which work motivation is influenced by rewards from an internal source as distinct from rewards arising from an external source), growth satisfaction (the vigor with which the job performer seeks opportunities for self-direction, learning, and personal accomplishment at work), and several specific satisfactions.

For the variable of general job satisfaction, nurses obtained a mean score $(\bar{x} = 4.38)$ significantly lower than that $(\bar{x} = 4.88)$ of the professionals in the

normative group ($\underline{Z} = -3.08$). Most mean scores of the nurses with respect to Core Job Dimensions and Psychological States were either similar to or higher than the mean scores of the professionals in the normative group. Only the Core Job Dimensions of task significance and autonomy were found to have significantly lower mean scores, a fact that may account for the depressed general satisfaction score. These findings, taken together, support the direct connection between Core Job Dimensions and Job Satisfaction that Hackman and Oldham (1976) postulate in their Job Characteristics Model.

For the variable of internal motivation, nurses in this study obtained a mean score ($\bar{x} = 5.94$) that was significantly higher than that ($\bar{x} = 5.77$) for the normative group ($\underline{Z} = 1.77$). According to Hackman and Oldham (1976), positive internal motivation results only from the presence of all three psychological That is, when a person learns the results of a task (knowledge of states. results) for which s/he is personally responsible (responsibility for work), and this task is something about which s/he cares (meaning of work), a selfperpetuating cycle is set up where positive work motivation is continued by self-generated rewards. If, as Hackman and Oldham (1976) postulate, positive internal motivation can only result from the presence of all three Critical Psychological States, then by definition, these States can be said to be present among the nurse respondents. Supporting such a position is the fact that for each of the Critical Psychological States, nurse respondents achieved a mean score that was statistically comparable to those of the normative group. Although Hackman and Oldham (1980) do not provide for a specific measurement that would denote presence or lack of presence of the Critical Psychological States, the directives for the interpretation of the JDS data clearly indicate that statistical comparability to normative data can be broadly taken as adequacy. The results suggest that nurses are experiencing motivation through this self-perpetuating cycle of self-generated rewards just as the dynamic is theoretically structured in the Job Characteristics Model (Hackman & Oldham, 1976).

The growth satisfaction mean score $(\bar{x} = 4.85)$ for this sample of nurses was lower than that of the professionals in the normative group ($\bar{x} = 5.06$), but the difference ($\underline{Z} = -1.19$) was not statistically significant. This implies that nurses are not particularly aggressive in terms of vigorously seeking opportunities for self-direction and personal accomplishment. However, the significantly lower scores of nurses with respect to autonomy may be related. If nurses perceive that their jobs do not allow for any degree of autonomy, they might not attempt to secure what is perceived not to be there.

Among the Job Satisfactions are several short scales dealing with job security, pay, co-workers, and supervision. With respect to job security, nurses obtained a mean score ($\bar{x} = 5.33$) that was significantly higher than that ($\bar{x} = 4.96$) of the professionals in the normative group ($\underline{Z} = 2.03$) which suggests that nurses experience and value considerable job security. In British Columbia, hospital-employed nurses are required under the terms of the collective agreement to be members of the nurses' union. It may be that established connections to a union would promote the value of job security.

With respect to satisfaction with pay, nurses obtained a mean score ($\bar{x} = 4.00$) that was lower than that of the professionals in the normative group ($\bar{x} = 4.40$), but the difference was not statistically significant ($\underline{Z} = -1.26$). The finding that pay is not perceived to be a particularly significant aspect of job satisfaction or lack of satisfaction for nurses, at least relative to other professional employees, may be inconsistent with common perceptions, but is

consistent with the research in general. For example, Godfrey (1978) reported that of 17,000 nurses surveyed, 46% indicated that they received a fair salary, 45% indicated an unfair salary, and 8% could not give an opinion. Seybolt, Pavett, and Walker (1978) reported that pay made a difference between nurses who stayed at their jobs and those who left, but it was seventh and last in a list of significant factors. Factors heading the list were growth-related aspects of the work. Similarly, Everly and Falcione (1976), reporting on the order of importance of various job aspects, identified pay to be part of external rewards of the job, and last in a list that began with relational aspects of the job, followed by internal rewards of the job. Wandelt, Pierce, and Widdowson (1981) reported that pay was a prime dissatisfier for nurses who left their jobs, but among the pooled group of leavers and stayers, it was not among the list of important job factors.

With respect to satisfaction with co-workers, nurses obtained a mean score $(\bar{x} = 5.59)$ that was statistically similar to that of the professional employee in the normative data ($\bar{x} = 5.48$, $\bar{Z} = .91$) This finding of perceived satisfaction with co-workers is consistent with those of other studies wherein interpersonal relationships of nurses and their peers and superiors were demonstrated to be significant influencers of job satisfaction (Everly & Falcione, 1976; Hinshaw et al., 1987).

For the variable of satisfaction with supervision, nurses obtained a mean score ($\bar{x} = 4.87$) that was statistically comparable to that ($\bar{x} = 4.89$) in the normative data ($\underline{Z} = -0.10$). Seybolt (1986) found that, for nurses, increased tenure brought with it an increased desire for feedback from agents in the job. Given that the nurses in this sample have indicated tenures of more than a brief length, this study finding may be reflecting that increased value

attached to feedback from agents.

With respect to the motivating potential score (MPS) for the job, nurses obtained a mean score ($\bar{x} = 129$) which was significantly lower than the mean obtained by professionals ($\bar{x} = 154$, $\underline{Z} = -2.81$) in the normative group. The sample mean was also lower than that found for nurses ($\bar{x} = 154$) in the study reported by Joiner et al., (1982). Given that Hackman and Oldham (1980) explain the sensitivity of the MPS to "very low scores for either autonomy or feedback", the low MPS shown by this sample is probably reflecting the fact that, for the study sample, the mean score for autonomy was significantly lower than that of the normative group.

Identified satisfactions and lack of satisfactions.

Given that the JDS variables are measured on a 7-point Likert scale, one way to determine satisfaction or the lack thereof is to arbitrarily set a cut-off score to signify satisfaction. Choosing the mean score of 5 or above out of 7 to indicate satisfaction, the JDS variables can be sorted according to their levels of satisfaction for this sample. Another way to determine satisfaction or the lack thereof is to review the significant differences between the mean scores of nurses and the mean scores of professionals in the normative group. These two methods have been combined to identify those JDS variables which describe as promoting satisfaction and those variables which nurses nurses describe as promoting a lack of satisfaction. Where nurses obtained a mean score of 5 or more on a JDS variable, and where the \underline{Z} test determined a significant positive difference on that same variable between nurses and professionals in the normative group, that variable is considered to promote satisfaction. Where nurses obtained a mean score of less than 5 on a JDS variable, and where the \underline{Z} test determined a significant negative difference

between nurses and professionals in the normative group, that variable is considered to promote a lack of satisfaction. According to this method of identification, those JDS variables described by this sample of nurses as promoting satisfaction were skill variety, task significance, dealing with others, internal motivation, and satisfaction with security. Those JDS variables described by this sample of nurses as promoting a lack of satisfaction were task identity, autonomy, general satisfaction, and motivating potential of the job.

In summary, these nurses are describing a job that promotes significant satisfaction in terms of the variety of skills required, the importance of the work itself, the extent of interacting with people, the security, and the rewards that are internally satisfying. The job promotes a lack of satisfaction as identified by the low level of autonomy and by the inability to complete a whole or identified piece of work. These job inadequacies apparently are not overcome by the identified satisfactions since both general job satisfaction and the motivating potential of the job are identified as unsatisfactory.

Results of Correlational Analysis

Pearson's correlation coefficient was used to test the relationships among the variables set out in the JDS and derived from the Job Characteristics Model (Hackman & Oldham, 1976). The coefficients were examined in two ways. First, the critical value of r was determined with the use of standard statistical tables (Hopkins & Glass, 1978). Using a significance level of .05 (two-tailed), and choosing an n of 90 rather than 100 to impose more rigor rather than less, the r-value of .208 was determined. Second, the coefficients were examined for their strength of correlation between variables.

Core Job Dimensions and Job Satisfactions.

Table 4 presents the results of the correlations between Core Job Dimensions and Job Satisfactions, independent and dependent variables, respectively. Skill variety was significantly correlated with general satisfaction (r = .2751), internal motivation (r = .3549), growth satisfaction (r = .3029), satisfaction with co-workers (r = .3328), and MPS (r = .3699). The strength of the correlations was weak with the strongest correlation occurring with MPS. No statistically significant correlations were demonstrated for satisfaction with security, pay, or supervision.

Task identity was significantly correlated with general satisfaction (r = .2685), growth satisfaction (r = .2703), and MPS (r = .6139). For MPS, the correlation achieved a moderate strength. Task significance was weakly correlated with general satisfaction (r = .2437), internal motivation (r = .2537), and MPS (r = .2896).

Autonomy was weakly correlated with satisfaction with security (r = .2506), satisfaction with co-workers (r = .3124), and satisfaction with supervision (r = .3126); moderately correlated with general satisfaction (r = .5123) and growth satisfaction (r = .5097); and strongly correlated with MPS (r = .8329).

Feedback from the job was weakly correlated with general satisfaction (r = .3228), internal motivation (r = .2536), growth satisfaction (r = .4462), satisfaction with security (r = .2974), and satisfaction with co-workers (r = .3056). It was moderately correlated with MPS (r = .7563). Feedback from agents was weakly correlated with general satisfaction (r = .2755), growth satisfaction (r = .2940), and MPS (r = .4424). It was moderately correlated with satisfaction with supervision (r = .5173).

Table 4 Intercorrelations Between Core Job Dimensions and Job Satisfactions

. :	Job Sat	isfactions						
Core Job Dimensions	General Satisfaction	Internal Motivation	Growth Satisfaction	Satisfaction Security	Satisfaction Pay	Satisfaction Co-workers	Satisfaction Supervision	Motivating Potential Score
Skill Variety Task Identity Task Significance Autonomy Feedback Job Feedback Agents Dealing with Others	.2751* .2685* .2437* .5123* .3228* .2755* .0726	.3549* .0494 .2537* .2018 .2536* .0488 .2447*	.3029* .2703* .1512 .5097* .4462* .2940* 0590	.1143 .1634 0776 .2506* .2974* .1764 0545	0083 .0728 .0688 .1910 .1719 .1286 1084	.3328* .1845 .1531 .3124* .3056* .1187 0015	0252 .0407 0368 .3126* .2042 .5173* .0073	.3699* .6139* .2896* .8329* .7563* .4424* .0916

*p<.05.

85

Dealing with others was significantly correlated only with internal motivation, and that correlation was weak (r = .2447).

The dependent variables showing the greatest number of significant correlations with Core Job Dimensions were general job satisfaction and MPS. Both were significantly correlated with six of the seven Core Job Dimensions. The exception in both cases was dealing with others. The dependent variable demonstrating no significant correlations was satisfaction with pay.

The results indicate that, for this sample of nurses, the job properties that are particularly potent with respect to general job satisfaction and motivation are task identity, or the ability to identify with a whole or complete piece of work; autonomy, or the degree of professional authority or discretion; and feedback, or the receipt of timely and relevant job performance information. The significant correlations between Core Job Dimensions and Job Satisfactions are widespread and lend support to Hackman and Oldham's theory of an operational connection between the specific characteristics of a job and the satisfactions available from that job.

Critical Psychological States and Job Satisfactions.

Table 5 sets out the correlations between Critical Psychological States and Job Satisfactions, intermediate and dependent variables, respectively. Meaning of work was weakly correlated with general satisfaction (r = .4273), internal motivation (r = .4626), growth satisfaction (r = .4843), satisfaction with co-workers (r = .4249), and satisfaction with supervision (r = .2660). No significant correlations were demonstrated between meaning of work and satisfaction with either security or pay.

-	Job Satisf	actions					
Critical Psychological States	General	Internal	Growth	Satisfaction	Satisfaction	Satisfaction	Satisfaction
	Satisfaction	Motivation	Satisfaction	Security	Pay	Co-workers	Supervision
Meaning of Work	.4373*	.4626*	.4843*	.1445	.1082	.4249*	.2660*
Responsibility of Work	.2262*	.4487*	.2007	.1067	0291	.2395*	.0380
Knowledge of Results	.2800*	.1354	.2978*	.3310*	.1115	.2258*	.2720*

*p<.05.

Table 5 Intercorrelations Between Critical Psychological States and Job Satisfactions

09

Responsibility of work was weakly correlated with general satisfaction (r = .2262), internal motivation (r = .4487), and satisfaction with co-workers (r = .2395). No significant correlations were demonstrated between responsibility of work and growth satisfaction, satisfaction with security, pay or supervision.

Knowledge of results was weakly correlated with general satisfaction (r =.2800), growth satisfaction (r = .2978), satisfaction with security (r = .3310), coworkers (r = .2258), and supervision (r = .2720). No significant correlations were demonstrated between knowledge of results and internal motivation or satisfaction with pay. The relationships of particular interest are those between the Critical Psychological States and internal motivation since Hackman and Oldham's theory specifically postulates internal motivation to be dependent upon The results are generally supportive of the theory. Internal these states. motivation was significantly correlated with two of the three psychological states (i.e., meaning of work r = .4626 and responsibility for work r = .4487). Internal motivation was not, however, significantly related with the Critical Psychological State of knowledge of results. These findings are consistent with others reported from this study where nurses described their work as significant and responsible, yet not particularly strong in terms of feedback from agents.

Growth Need Strength, Critical Psychological States, and Job Satisfactions.

Hackman and Oldham (1976) contend that the relationships between Core Job Dimensions and Critical Psychological States; and between Critical Psychological States (intermediate variables) and Job Satisfactions (dependent variables) are affected by an individual's need for personal growth and accomplishment at work or GNS (mediating variable). Specifically, Hackman and Oldham suggest that GNS intensifies the relationship. If this were the case, one would expect to see high correlations between GNS and Critical Psychological States, and between GNS and Job Satisfactions. Table 6 sets out the correlations for GNS, together with its subscales of "would like" and "need" and Job Satisfactions. No statistically significant correlations were demonstrated between GNS and Critical Psychological States or between GNS and Job Satisfactions. However, one statistically significant negative correlation was found between the need subscale of GNS and satisfaction with pay (r = -.245). This implies that the more one tends to demand of nursing, the less one might be satisfied with the pay of nursing. The lack of correlation between GNS and either Core Job Dimensions or Job Satisfactions fails to support Hackman and Oldham's theory of Growth Need Strength as a mediating variable in the Job Characteristics Model (1976), and is consistent with the findings of Carpenter (1989). She studied job characteristics and job satisfactions of 72 academic nursing managers and reported that the evidence failed to demonstrate the mediating activity of Growth Need Strength.

The results of the correlational analysis address the second research question: What is the relationship between job design variables and job satisfactions for hospital-employed nurses as measured by scores on the JDS? from the constitution of the constitution of the findings, support Hackman and Oldham's contention that there are significant relationships between job design variables and job satisfactions. All Core Job Dimensions were significantly correlated with at least one job satisfaction. Of the Core Job Dimensions, autonomy, task identity, and feedback were most widely and strongly related to Job Satisfactions. For the intermediate variables, Critical Psychological States, the findings revealed a positive correlation with Job Satisfactions. Support for the idea of correlation between two of these states and internal work motivation was found. No

Table 6 Intercorrelations Betwe	en Growth	Need Stre	ngth (GNS) and Job S	atisfaction	6	
••							
	Job Satisf	factions					
	1		n	n	'n	n rs	n n
Growth Need Strength	General Satisfaction	Internal Motivation	Growth Satisfaction	Satisfaction Security	Satisfaction Pay	Satisfaction Co-workers	Satisfaction Supervision
Would Like Need Combined GNS	0776 1799 1463	.1987 .0062 .1524	0244 0557 0426	.0366 1177 0496	0503 2447* 1701	.0008 1123 0609	.0952 .1197 .1487
* \ \ \ \ \							

*p<.03.

£9

relationship was found between the variable of Growth Need Strength (GNS) and either Core Job Dimensions or Job Satisfactions.

Analysis of Selected Nurse Characteristics and Job Satisfaction

The chi-square test was used to determine associations between selected personal and professional characteristics of the nurses and job satisfaction as measured by scores on the JDS. Table 7 details the results of the chi-square. Of the six selected nurse characteristics, none was significantly associated with general job satisfaction. Educational preparation and nursing experience showed significant associations with certain aspects of job satisfaction.

Educational preparation was negatively associated with satisfaction with pay (X^2 = 62.24, p =.000). Sixty percent of all nurses in the sample indicated that they were not satisfied with the pay in that they scored less than 5 on the satisfaction scale. Of those nurses, most (57%) had an education level beyond that of a diploma plus post-basic courses.

Educational preparation was positively associated with growth satisfaction $(X^2 = 42.80, p = .002)$. Seventy percent of all nurses in the sample indicated that they were satisfied with the growth potential in their jobs. Of those nurses, 66% had an educational level beyond that of a diploma plus post-basic courses.

Educational preparation was positively associated with satisfaction with coworkers ($X^2 = 40.49$, <u>p</u> = .000). Eighty-eight percent of all nurses in the sample indicated that they were satisfied with their co-workers. Of those, 64% had an educational level beyond that of diploma plus post-basic courses.
*p < .05.

Educational Preparation 27.175 130 Age Employment Tenure Pattern of Practice Area of Practice Years Experience Nurse Characteristics 17.306 .663 44.667 ,126 25.141 .718 13.289 .972 17.790 .961 Job Satisfactions General Satisfaction 6.583 .582 12.274 .584 3.751 .878 9.412 .667 7.434 .827 8.349 ,594 Internal Motivation 38,461 .315 33,931 ,283 ,30 25.255 .448 33.951 .282 42.806 .002 * 20 16.182 .705 Growth Satisfaction 23.371 .933 18.606 .547 24,436 .751 37.130 .173 18.577 .549 22.113 .629 Satisfaction Security 18.457 .780 32.405 .640 37.054 .420 . 36 62.241 .000 • 24 21.242 .880 46.782 .282 Satisfaction Pay 20.165 .687 20.382 .203 19.615 .718 40.497 -000 * 16 12.015 .915 19.779 .872 Satisfaction Co-workers 17.062 .648 43.899 .048 • 30 13,752 .842 27.696 .586 21.605 .658 29.912 .712 Satisfaction Supervision 25.015 .627 63.529 .000 * 24 24.167 .253 24.768 .074 19,192 .509 8,854 ,919 MPS X² Significance df

 Table 7

 Chi-Square Results of Selected Personal and Professional Nurse Characteristics and Job Satisfactions

These findings with respect to educational preparation are slightly different than those found in the literature. For example, Sleightholm Cairns and Cragg (1987) reported in their qualitative study that nurses who were more educated tended to experience less general job satisfaction. In this study, no statistical difference in general job satisfaction was found among nurses of various educational levels. This finding is consistent with those of Lemler and Leach (1986) and Simpson (1985). Other researchers (Larson et al., 1984; Munro, 1983), who studied educational levels and various aspects of job satisfaction, reported that no significant relationships were identified. The significant findings of this study regarding educational levels and particular aspects of job satisfaction may be related to the unusually high educational levels found in this sample of nurses. Alternatively, the significant findings may be demonstrating the effects of the increased number of discrete categories used to describe education. There are, in fact, many different educational levels among nurses and if the different levels of education foster different attitudes and behaviors among nurses, testing educational preparation as a twocategory concept instead of a four-category or five-category concept might artificially blur differences that may be present and operating on the dynamics of job satisfaction. Nursing experience was significantly related to satisfaction with supervision (X^{2} = 43.89, p = .048). Sixty-eight percent of all nurses in the sample indicated satisfaction with supervision by registering 5 or more on the 7-point scale. Of those nurses, 77% had nursing experience of more than five years.

Experience was also significantly associated with the motivating potential score (MPS) of the job ($X^2 = 63.52$, p = .000). The MPS, as the grand multiplicative score of Core Job Dimensions, ranges from 1 to 343. The MPS

scores were converted to a 7-point scale in order to make them comparable to the other data and thus suitable for the purposes of carrying out the chisquare test. The conversion was achieved by regrouping the data to reflect the non-linear feature of the MPS calculation (the formula is MPS = [skill variety +task identity + task significance / 3] x autonomy x feedback from the job). For each of the formula components, there is a possible score of 1, 2, 3, and so on up to 7. By plugging in each possible score separately, MPS class boundaries of 1, 8, 27, 64, 125, 216, and 343, and the associated ranges were calculated consistent with the formula construction. Using the MPS as one proxy for general job satisfaction, this finding mirrors that reported by McShane (1985) where job satisfaction was highest for nurses having from 1 to 5 years of nursing experience, then falling off over the next 5 years, and finally resuming increased levels during the 10 to 20 year period. McShane suggests that the hiatus that occurs between the first few years of experience and the later years of experience can be explained in terms of first, a nurse's initial meeting with the reality of the workplace and second, the supposition that those nurses who could not reconcile the ideal with the real resigned from nursing leaving those who found satisfaction in their work.

The findings with respect to length of nursing experience and job satisfaction add to the mixed reports in the research literature. That is, when job satisfaction is measured as a global concept, researchers report both a lack of association (Hart, 1988; Lemler & Leach, 1986) and a significant association (Simpson, 1985) between nursing experience and job satisfaction. When job satisfaction is measured and analyzed via discrete aspects of the work, significant relationships between nursing experience and specific aspects of job satisfaction have been reported (McShane, 1985). The findings of this study suggest that there is no relationship between length of nursing experience and general job satisfaction, but that there is a significant relationship between length of nursing experience and specific aspects of job satisfaction, namely satisfaction with supervision and the motivating potential of the job.

Other personal and professional characteristics of the nurses, that is, age, tenure, area of practice, and pattern of nursing care delivery showed no association with either general job satisfaction or any aspect of job satisfaction. The results of the chi-square analysis address the third research question: What is the relationship between selected personal and professional nurse characteristics and job satisfactions for hospital-employed nurses as measured by scores on the JDS? Using six selected personal and professional characteristics of the nurse and eight measures of job satisfaction, a 48 cell chi-square was developed. The findings further add to the mixed reports in the literature. No significant relationships were found between nurse characteristics and general job satisfaction. Two nurse characteristics were significantly related to specific measures of job satisfaction. The few significant findings from the analysis suggest that the focus on nurse characteristics appears to add little to the understanding of job satisfaction as a global concept. However, if job satisfaction is, in fact, a composite of discrete aspects of the job, these findings connecting particular nurse characteristics and certain aspects of job satisfaction could be useful in focussing on discrete specifics rather than on comprehensive generalities.

Summary

The findings of this study have been presented in three sections. The first section presented the findings with respect to the sample which consisted of 96 nurses from three hospitals in British Columbia. The nurses in this

sample were found to have characteristics similar to those reported elsewhere. However, the level of education among the nurses in this sample was higher than that noted in other reports and studies.

The second section reported on the findings with respect to the JDS. Both descriptive and correlational analysis were employed. Findings of the JDS for the sample were compared to normative JDS findings for other professionals. The results indicated that nurses perceived their work to be important, to provide rewards of security and personal fulfillment, to provide variety in terms of required skills, and to provide opportunities for extensive interaction with other people. However, nurses also perceived their work to lack the potential to provide a feeling of ownership of one's work, to lack any significant authority necessary to carry out the work of nursing, to lack motivation from sources external to themselves, and to lack job satisfaction in general. Correlational results generally supported the theoretical model by Hackman and Oldham (1976) with one exception. Growth Need Strength is postulated to be the mediating variable in the model, but the evidence failed to support such a construct.

The third section reported on the chi-square analysis of selected nurse characteristics and job satisfactions. The results failed to demonstrate a significant relationship between personal and/or professional characteristics of nurses and general job satisfaction as perceived by nurses.

Chapter Five

Summary, Conclusions, and Implications

Summary

The impetus for this study came from the fact that, although nursing literature has consistently identified problems in relation to job satisfaction for nurses, little has been done in the way of successfully identifying sources of job satisfaction or the lack of job satisfaction with any degree of specificity. The study was designed to advance the exploration of job satisfaction among hospital-employed nurses by using an established theoretical formulation of job satisfaction called the Job Characteristics Model (Hackman & Oldham, 1976) and a standardized tool called the Job Diagnostic Survey (Hackman & Oldham, 1980) to identify and measure job design variables and job satisfaction. A Nurse Characteristics Questionnaire was developed by the investigator to identify personal and professional characteristics of the respondents. Specific questions guiding the study were: (a) How do hospital-employed nurses perceive job characteristics and job satisfaction?, (b) What is the relationship between job design variables and job satisfaction for hospital-employed nurses?, and (c) What is the relationship between selected personal and professional characteristics and job satisfaction among hospital-employed nurses?

The study was carried out at three acute care hospitals in British Columbia. Data were collected from a convenience sample of 96 nurses who met the established criteria. Each participant completed the Nurse Characteristics Questionanaire and responded to the Job Diagnostic Survey.

Data from the study were analyzed using the computer program, Statistical

Package for the Social Sciences (SPSS/PC + Version 2.0). Specific tests included descriptive statistics, Pearson correlation coefficient, and chi-square.

The findings related to the personal and professional characteristics of this sample of nurses revealed information about age, nursing experience, tenure, area of nursing practice, pattern of nursing practice, and educational level.

Most nurses in this sample indicated that they were in their middle years or older. Sixty percent of the nurses were between the ages of 31 and 45. Nineteen percent were 30 years or younger. The average length of nursing experience was 13 years. Half of the nurses had less than 14 years of nursing experience, and half had 14 years of experience or more. Most nurses in this sample indicated employment tenures of more than 3 years. Forty-six percent of the respondents had been with their current employer for more than 6 years. Only 15% of the nurses had employment tenures of 1 year or less.

Most respondents indicated that they worked in the area of medicalsurgical nursing (46%), and 35% indicated employment in either intensive care nursing or operating room nursing. The type of nursing care delivered as indicated by these respondents was roughly equally shared among primary nursing, modified primary care nursing, and team nursing.

With respect to educational level, the analysis of variance indicated a significant difference among respondents from individual hospitals. Data were analyzed and findings reported according to individual hospitals and according to their entirety. For the whole sample, only 10% of the nurses indicated a diploma as their highest level of education. Sixty-three percent indicated that they had one or more post-basic courses or university courses, and 34% indicated that they held a baccalaureate degree in nursing.

The profile of this group of nurses, generated from information about

educational level, age, experience, tenure, area of practice, and pattern of nursing care delivery was similar to that reported through provincial and national data with one exception. The educational level was found to be generally higher among this sample of nurses than among those from other reports.

The first research question asked how nurses perceived their job characteristics and job satisfactions as measured by responses on the JDS. The findings indicated that nurses perceive their job as having five chief Three of those characteristics were identified to be at characteristics. significantly higher levels than in other professional jobs when compared with normative data. They were: the extensive number of skills and abilities required to do the job (skill variety); the extreme importance of the job, both from a personal as well as a societal perspective (task significance); and the extent and intensity of interaction with people throughout the day (dealing with others). The remaining two chief characteristics of the job were identified to be at significantly lower levels than in other professional jobs when compared with normative data. They were the ability of the jobholder to identify with a clearly circumscribed piece of work (task identity), and the degree of individual discretion and/or authority available to the jobholder (autonomy).

With respect to perceived job satisfactions, results indicated that, compared to other professional jobholders, nurses identified significantly greater job satisfaction arising from the variety of skills required, the importance of the work itself, the extent of interaction with people, security, and the rewards that were internally satisfying. With respect to lack of job satisfaction, nurses in this study identified a low level of autonomy and an inability to complete a whole or identified piece of work. These job inadequacies were not overcome by the identified satisfactions since results showed that both the general job satisfaction and the motivating potential for the job were identified as less satisfactory in relation to normative groups.

The second research question asked about the relationship between job design variables and job satisfactions for hospital-employed nurses as measured by scores on the JDS. The findings, based on correlational analysis, provided general support for Hackman and Oldham's Job Characteristics Model (1976). Significant correlations were found between job design variables and job satisfactions. However, like previous work of Carpenter (1989), the findings in this study failed to confirm the activity of Growth Need Strength as a mediating variable.

All independent Core Job Dimension variables, except the variable dealing with others, were significantly correlated with general job satisfaction and the specific job satisfaction, MPS. There were some significant correlations with the other Job Satisfactions variables but no pattern emerged except for the lack of any significant correlations between Core Job Dimensions variables and satisfaction with pay. The Core Job Dimensions variables, autonomy and feedback displayed a stronger correlation with general job satisfaction and motivational potential of the job than any other of the independent variables.

For the intermediate variables of the Critical Psychological states (meaning of work, responsibility of work and knowledge of results), the findings generally support the postulation by Hackman and Oldham (1976) that a significant fostering relationship exists between these states and internal motivation. Significant correlations were demonstrated between two of the states (meaning of work and responsibility of work) and internal motivation. All Critical Psychological States were significantly correlated with general job satisfaction and satisfaction with co-workers. No significant correlations were demonstrated between Critical Psychological States and satisfaction with pay.

For the mediating variable of Growth Need Strength, no evidence was found to indicate a mediating activity of this variable. No relationship was found between the variable Growth Need Strength and either Critical Psychological States or Job Satisfactions.

The third research question inquired into the relationship between selected personal and professional nurse characteristics and job satisfaction for hospitalemployed nurses as measured by scores on the JDS. Those characteristics were years of nursing experience, current employment tenure, area of nursing, pattern of nursing care delivered, maturity (age), and educational level. The findings, based on chi-square analysis, failed to demonstrate significant relationships between personal and professional characteristics and general job satisfaction. Two characteristics, namely educational preparation and nursing experience, were significantly related to certain specific measures of Job Satisfaction. Educational preparation was significantly and positively related to growth satisfaction and satisfaction with co-workers and negatively related to satisfaction with pay. Years of experience was significantly and positively associated with satisfaction with supervision and motivational potential score.

Conclusions

Analysis of the data suggested the following major conclusions:

1. The work of nursing was perceived as extremely important, demanding in terms of the numbers of skills and abilities required, and intense with respect to the extent of human interaction that is part of the daily activity. Nursing was not perceived to allow one to identify with a complete piece of work or a specific result, and nursing was not perceived to provide autonomy for the jobholder.

- 2. Compared to professionals in general as reported in normative data, hospital-employed nurses were not as satisfied with the motivating potential of the job, with the job in general, or with the specific job design factors of autonomy and task identity.
- 3. Compared to professionals in general as reported in normative data, nurses indicated that they were more satisfied with the specific job design factors of skill variety, task significance, dealing with others, job security, and rewards that were felt to be internally satisfying.
- 4. The results supported the significant relationships between Core Job Dimensions and Job Satisfaction as predicted by Hackman and Oldham's Job Characteristics Model (1976). The Core Job Dimensions most strongly correlated with Job Satisfaction and motivating potential score were autonomy and feedback from the job.
- 5. No evidence was found to support Hackman and Oldham's (1976) contention that the variable Growth Need Strength has a mediating effect on other variables.
- 6. The evidence failed to support the idea of a relationship between selected personal and professional characteristics of the nurse and general job satisfaction. However, the two characteristics of

educational preparation and nursing experience were significantly associated with certain specific measures of Job Satisfaction. Educational preparation was positively associated with growth satisfaction and satisfaction with co-workers and negatively associated with satisfaction with pay. Years of nursing experience was positively associated with satisfaction with supervision and motivating potential score.

Implications

The implications of this study are most pertinent to the areas of nursing administration and nursing research. Nursing administration has the responsibility to develop, arrange, and rearrange organizational factors that bear on the practice of nursing. Nursing research can guide not only theory development with respect to the work of nursing, but the empirical testing prior to implementation.

Implications for Nursing Administration

One of the findings of this study revealed the satisfaction that nurses experience from such job design variables as skill variety, task significance, interaction with people, and job security. It could be valuable for nurse administrators to be aware of these satisfactions and to further enhance them where possible. For example, informal and formal recognition and valuing of those job aspects by nurse administrators could increase satisfaction, pride, and motivation among staff. Specific job design variables could be examined for their use as possible strategies in maintaining and increasing job satisfaction. For example, a program of job rotation where a nurse would choose temporary assignment from among a number of various work areas may well serve to respond to the nurse's enjoyment of skill variety. Further, by increasing those aspects of the job that are identified as promoting satisfaction, it is reasonable to speculate that nurse retention would be enhanced.

Other study findings identified that the lack of autonomy and task identity promote a lack of job satisfaction. The knowledge about which aspects of the job are counterproductive to job satisfaction could guide nurse administrators in re-designing the work of nursing. For example, primary nursing was developed, among other reasons, to increase task identity and job satisfaction; the result has been not only greater task identity and job satisfaction, but greater job autonomy (Gillies, 1982). Nurse administrators could assess primary nursing for its value in improving job satisfaction. Other newer strategies could be developed to increase both autonomy and task identity. For example, increased "ownership" of the nurse's work might be enhanced through the exploration of natural work units or the rearrangement of work according to patient needs as opposed to organizational needs. Another possible strategy to increase the nurse's personal identification with her/his work is to explore the use of contracts developed within the primary nurse and patient dyad. Autonomy may be enhanced by contracting with staff nurses to identify all those issues and sources of control that are now not in the hands of nurses but could or should be in the hands of nurses.

Implications for Nursing Research

The implications for nursing research arise from a number of findings in this study. The finding about the importance of autonomy in relation to job satisfaction in nursing implies that more needs to be learned about this concept. It would be useful to explore autonomy through the eyes of nurses. For example, how do nurses define autonomy? What are its key elements? Which of the key elements are under the control of the organization and which of the key elements are under the control of the individual nurse? The answers to these questions would provide some useful options with respect to redesigning the work of nursing to achieve greater autonomy and therefore greater job satisfaction.

Another study finding was the significant degree to which nurses rely on their own internal reward system for motivational energy. Research could provide the exploration of this operating system. It would be helpful to have explicated by nurses those factors which allow them to feel good about their work. The identification of such factors would be useful in redesigning the work of nursing. Benner (1984), who has used qualitative research to elucidate some of the factors nurses experience as profoundly meaningful, provides a possible blueprint for further research in this area.

Other findings of the study were identified from comparing JDS results of hospital-employed nurses and other professionals from normative data. One finding was that the job design variables of autonomy and task identity are significantly lower for hospital-employed nurses than for other professionals. Another finding was that Job Satisfactions of MPS and general job satisfaction are significantly lower for nurses than for professionals in general. If other professional jobs provide more of the attributes and products that are desirable to nurses, it may be useful to carefully examine the job structure of other professionals. Of particular value would be the ways in which job design variables are structured in the work and how they are connected to the satisfactions available for the jobholder.

The mixed findings of this study with respect to significant connections between personal and professional characteristics and Job Satisfactions implies the need for further exploration of these constructs. In particular, there needs to be a separation between global job satisfaction and discrete aspects of job satisfaction. If the literature could be examined according to such a separation, and further studies carried out using this separation, it may be possible to identify more clearly any connection between personal and professional characteristics of the nurse and various kinds of job satisfaction.

Finally, research can provide the replications of this study that are necessary to further the theoretical and empirical knowledge about job satisfaction for nurses. The theoretical framework (Hackman & Oldham, 1976) for this study has found general support in this empirical test. This model may have the ability to explain job satisfaction in terms of its functional elements and it would behoove nursing to continue with testing among practising nurses. Further use of the JDS could provide nursing with a standard tool by which to measure and discuss job satisfaction among nurses, either in various groups or in the profession as a whole.

References

- Aiken, L. & Mullinix, C. (1987). Special report: The nurse shortage--myth or reality? <u>New England Journal of Medicine</u>, 317 (10), 641-646.
- Attridge, C. & Gitterman, G. (1988). Continuing education in nursing practice. In A. Baumgart and J. Larsen, (Eds.), <u>Canadian nursing faces the future:</u> <u>Development and change</u> (pp.363-379). Toronto: C.V. Mosby.
- Barr, S.H., Brief, A.P. and Aldag, R.J. (1978). Measurement of perceived task characteristics. <u>Working Paper 78-14</u>. College of Business Administration, University of Iowa.
- Baumgart, A. & Larsen, J. (1988). <u>Canadian nursing faces the future:</u> <u>Development and change</u>. Toronto: C.V. Mosby.
- Berns, J. (1982). Job satisfaction and conflict management. <u>Nursing</u> <u>Leadership</u>, 5, 27-33.
- Betz, E.L. (1969). Need reinforcer correspondence as a predictor of job satisfaction. <u>Personnel and Guidance Journal</u>, <u>47</u>, 878-883.
- Brayfield, A. & Rothe, H. (1951). An index of job satisfaction. Journal of <u>Applied Psychology</u>, 35, 307-11.
- Brooten, D., Kumar, S., Brown, L., Butts, P., Finkler, S., Bakewell Sachs, S., Gibbons, A., & Delivoria-apadopolous (1986). A randomized clinical trial of early hospital discharge and home follow-up of very-lowbirth-weight infants. <u>New England Journal of Medicine</u>, 315 (9), 634-39.
- Carpenter, K. (1989). Academic middle managers for baccalaureate nursing: Work motivation and satisfaction. Journal of Nursing Education, 28 (6), 256-264.
- Culbert, S. & McDonough, J. (1980). <u>The invisible war: Pursuing self-interests at</u> work. New York: John Wiley & Sons.
- Cummings, T. (1985). Organization development and change (3rd ed.). St.Paul, MN: West.
- Devore, J. & Peck, R. (1986). <u>Statistics: The exploration and analysis of data.</u> St. Paul, MN: West.
- Economic Council of Canada. (1987). <u>Canadian hospital costs and productivity</u>. Ottawa: Minister of Supply and Services Canada.
- Eichorn, M.L. & Frevert, E.I. (1979). Evaluation of a primary nursing system using the quality patient care scale. Journal of Nursing Administration, 9 (10), 11-15.

- Everly, G. & Falcione, R. (1976). Perceived dimensions of job satisfaction for staff registered nurses. <u>Nursing Research</u>, 25 (5), 346-348.
- Fletcher, A. (1987, April 9). Job fair aids hospitals in search of nurses. <u>Vancouver Sun</u>, p.A10.
- Frederiksen, L.W. (1978). Behavioral reorganization of a professional service system. Journal of Organizational Behavior Management, 2 (1), 2-9.
- Gillies, D.A. (1982). <u>Nursing management: A systems approach</u>. Philadelphia, PA: W.B. Saunders.
- Godfrey, M. (1978). Job satisfaction--or should it be dissatisfaction? How nurses feel about nursing Part 3. Nursing 78, 8 (6), 65-73.
- Griffin, R. W. (1983). Subjective and objective sources of information in task redesign: A field experiment. <u>Administrative Science Quarterly</u>, <u>28</u> (2), 184-200.
- Griffin, R.W. & Chonko, L. (1977). Employee preferences for job characteristics. <u>Proceedings of the 37th Annual Meeting of the Academy of</u> <u>Management</u>, 57-61.
- Guilford, J.P. & Fruchter, B. (1973). <u>Fundamental statistics in psychology and</u> <u>education</u> (5th ed.). New York: McGraw-Hill.
- Guthrie, M., Mauer, G., Zawacki, R. & Cougar, J.D. (1985). Productivity: How much does this job mean? <u>Nursing Management</u>, <u>16</u> (2), 16-20.
- Hackman, R. & Oldham, G. (1975). Development of the job diagnostic survey. Journal of Applied Psychology, 60 (2), 159-170.
- Hackman, R. & Oldham, G. (1976). Motivation through the design of work: Test of a theory. <u>Organizational Behavior and Human Performance</u>, <u>16</u> (2), 250-279.
- Hackman, R. & Oldham, G. (1980). Work Redesign. Reading, MA: Addison Wesley.
- Hale, C. (1986). Measuring job satisfaction. Nursing Times, 82 (5),43-46.
- Hart, A.L. (1988). Job satisfaction and personality: Are they related? <u>AORN</u> Journal, 47 (2), 479-488.
- Health Manpower Research Unit. (1986). <u>Difficult to fill positions</u> survey. Vancouver, B.C.: University of British Columbia.
- Health Manpower Research Unit. (1988). <u>The nurse manpower study. volume I.</u> <u>Report of the nurse manpower advisory committee</u>. Vancouver, BC: Author, University of British Columbia.
- Herzberg, F. (1966). <u>Work and the motivation of man</u>. New York: New American Library.

- Herzberg, F. (1968). One more time: How do you motivate employees? <u>Harvard</u> <u>Business Review</u>, <u>46</u> (1), 53-62.
- Hinshaw, A., Smeltzer, C. & Atwood, J. (1987). Innovative retention strategies for nursing staff. Journal of Nursing Administration, 17 (6), 8-16.
- Hoffman, C. & Reed, J. (1981). When is imbalance not discrimination? In W. Block and M. Walker (Eds.), <u>Discrimination, affirmative action, and</u> equal opportunity. (pp. 187-216).Vancouver, BC: The Fraser Institute.
- Hopkins, K. & Glass, G. (1978). <u>Basic statistics for the behavioral sciences</u>. Englewood Cliffs. NJ: Prentice Hall.
- Huey, F. & Hartley, S. (1988). What keeps nurses in nursing: 35000 nurses tell their stories. <u>American Journal of Nursing</u>, <u>88</u> (2), 181-188.
- Inglehart, J. (1987). Health policy report: Problems facing the nursing profession. New England Journal of Medicine, 317 (10), 646-651.
- Jenny, J. (1982). <u>Issues affecting nurses' hospital employment in the 80's</u>. Ottawa, ON: Canadian Hospital Association.
- Joiner, C., Johnson, V., Chapman, J. & Corkrean, M. (1982). The motivating potential in nursing specialties. Journal of Nursing Administration, 12 (2), 26-30.
- Juhl, N. (1985). Educators ask: What leads to job satisfaction? <u>Nursing Success</u> <u>Today</u>, <u>2</u> (6), 22-25.
- Kahn, J. & Westley, W. (1984). <u>The working environment in Canadian hospitals:</u> <u>Constraints and opportunities</u>. Ottawa, ON: Minister of Supply and Services.
- Kazanjian, A. & Wong, G. (1985). <u>Life cycle patterns of registered nurses in BC:</u> <u>Predicting future supply.</u> Vancouver: B.C. Health Services Research and Development.
- Larson, E., Lee, P., Brown, M.A. & Shorr, J. (1984). Job satisfaction: Assumptions and complexities. Journal of Nursing Administration, 14 (1), 31-38.
- Layton, D. (1988). <u>The nurse manpower study: volume III Influence of the</u> workplace on nurse manpower supply in British Columbia: An <u>exploratory study</u>. Vancouver, BC: Health Manpower Research Unit, University of British Columbia.
- Lemler, S. & Leach, A. (1986). The effect of job satisfaction on retention. Nursing Management, 17 (4), 66-68.

- Locke, E. (1976). Nature and causes of job satisfaction. In M. D. Dunnette (Ed.), <u>Handbook of industrial and organizational psychology</u> (pp. 1297-1349). Chicago, IL: Rand McNally.
- McShane, S. (1985). <u>The employment research project: A summary report</u>. Unpublished manuscript, Simon Fraser University, Vancouver.
- Moos, R. (1981). <u>Work environment scale manual</u>. Palo Alto, CA: Consulting Psychologists Press.
- Moos, R. (1986). Work as a human context. In M. Pallak & R. Perloff (Eds.), <u>Psychology and work: Productivity, change and employment</u> (pp. 9-52). Washington, DC: American Psychological Association.
- Munro, B. (1982). Job satisfaction among recent graduates of schools of nursing. Nursing Research, 32 (6), 350-355.
- Oldham, G.R., Hackman, J.R., & Stepina, L.P. (1979). Norms for the JDS. Journal Supplement Abstract Service, 9 (14), Ms. No. 1819.
- Parkes, K. (1982). Occupational stress among student nurses: A natural experiment. Journal of Applied Psychology, 67 (6), 784-796.
- Prescott, P. & Bowen, S. (1987). Controlling nurse turnover. <u>Nursing</u> <u>Management</u>, 18 (6), 60-66.
- Registered Nurses Association of B.C. (1988). <u>Descriptive study of demographic</u> <u>characteristics and job satisfaction of B.C. registered nurses with</u> <u>three educational backgrounds</u>. Vancouver, BC: Author.
- Renwick, P. & Lawler, E. (1978). What you really want from your job. <u>Psychology Today</u>, <u>11</u> (12), 53-66.
- Sanger, E., Richardson, J. & Larson, E. (1985). What satisfies nurses enough to keep them? <u>Nursing Management</u>, <u>16</u> (9), 43-46.
- Sarata, B.P. (1977). Job characteristics, work satisfactions, and task involvements as correlates of service delivery strategies. <u>American</u> <u>Journal of Community Psychology</u>, 5 (1), 99-109.
- Seybolt, J., Pavett, C., & Walker, D. (1978). Turnover among nurses: It can be managed. Journal of Nursing Administration, 8 (9), 4-9.
- Seybolt, J. (1986). Dealing with premature employee turnover. <u>Journal of</u> <u>Nursing Administration</u>, <u>16</u> (2), 26-32.
- Simms, L., Price, S. & Ervin, N. (1985). <u>The professional practice of nursing</u> <u>administration</u> (pp.249-263). New York: John Wiley & Sons.
- Simpson, K. (1984). The delegation of reponsibility and authority in the nursing service hierarchy and its relationship to indicators of quality care. In W.v.Eimeren, R. Englebrecht, & Ch.D. Flage, (Eds.), <u>Health Systems</u>

Research, 3rd International Conference on System Science in Health Care (pp. 664-667). Berlin Heidleberg: Springer Verlag.

- Simpson, K. (1985). Job satisfaction or dissatisfaction reported by registered nurses. <u>Nursing Administration Quarterly</u>, 9 (3), 64-73.
- Sleightholm Cairns, B. & Cragg, C. (1987). Sources of job satisfaction and dissatisfaction among baccalaureate staff nurses in hospitals. <u>Nursing</u> <u>Papers</u>, 19 (1),15-28.
- Staff, Nursing 78. (1978). Probe Part 1. Nursing 78, 8 (4), 14-25.
- Staff, Nursing 78. (1978). Probe Part 2. Nursing 78, 8 (5), 19-27.
- Staff, (1986, May). Nurse trends. <u>RNABC News</u>, 18 (3), 16-17.
- Statistics Canada and Canadian Nurses Association. (1986). Nursing in Canada 1985. Ottawa: Authors.
- Storey, R. (1981). <u>Turnover of staff nurses in Nova Scotia</u>. Halifax, NS: Council of Teaching Hospitals, Registered Nurses Association of Nova Scotia and Nova Scotia Department of Health.
- Tirney, T. & Wright, N. (1973). Minimizing the turnover problem: A behavioral approach. <u>Supervisor Nurse</u>, <u>4</u> (8), 47-57.
- Tziner, A. (1983). Correspondence between occupational rewards and occupational needs and work satisfaction: A canonical redundancy analysis. Journal of Occupational Psychology, 56 (1), 49-56.
- Vroom, V.H. (1964). Work and motivation. New York: John Wiley & Sons.
- U.S. Department of Labor. (1965). <u>Dictionary of occupational titles</u>. Washington, DC: U.S. Government Printing Office.
- Wandelt, M., Pierce, P. & Widdowson, R. (1981). Why nurses leave nursing and what can be done about it. <u>American Journal of Nursing</u>, 81 (1), 72-77.
- Wanous, J.P. & Lawler, E.E. III. (1972). Measurement and meaning of job satisfaction. Journal of Applied Psychology, 56 (2), 95-105.
- Weiss, D.J., Dawis, R.V., England, G.W. & Lofquist, L.H. (1967). <u>Manual for the</u> <u>Minnesota satisfaction questionnaire</u>. Minneapolis, MN: Industrial Relations Center, University of Minnesota.

ſ

The Job Diagnostic Survey

(Hackman & Oldham, 1980)

This appendix reproduces the Job Diagnostic Survey (JDS), an instrument designed to measure the key elements of the job characteristics theory. The survey measures several job characteristics, employees' experienced psychological states, employees' satisfaction with their jobs and work context, and the growth need strength of respondents. For a complete description of the pb characteristics theory and the variables measured by the JDS, see Chapter tof this volume.

The JDS was designed to be completed by the incumbents of the job or jobs in question—not by individuals outside the job. An instrument designed for the latter purpose is entitled the Job Rating Form (JRF) and is reproduced in Appendix B. Instructions for scoring the JDS and JRF may be found in Appendix C. JDS norms for several job families are provided in Appendix E and may be used for comparison purposes with JDS data collected from many jobs.

The JDS is not copyrighted and therefore may be used without the authors' permission. However, prior to using the JDS, one should carefully read the users' guide for administering and interpreting the instrument (see Appendix D).

A short form of the JDS has also been developed. It excludes measures of the experienced psychological states and uses fewer items to measure other key variables in the job characteristics theory. The JDS short form and its scoring key may be found in Hackman and Oldham (1974).

:

This questionnaire was developed as part of a Yale University study of jobs and how people react to them. The questionnaire helps to determine how jobs can be better designed, by obtaining information about how people react to different kinds of jobs.

On the following pages you will find several different kinds of questions about your job. Specific instructions are given at the start of each section. Please read them carefully. It should take no more than 25 minutes to complete the entire questionnaire. Please move through it quickly.

The questions are designed to obtain your perceptions of your job and your reactions to it.

There are no trick questions. Your individual answers will be kept completely confidential. Please answer each item as honestly and frankly as possible.

Thank you for your cooperation.

SECTION ONE

This part of the questionnaire asks you to describe your job, as objectively as you can.

Please do **not** use this part of the questionnaire to show how much you like or dislike your job. Questions about that will come later. Instead, try to make your descriptions as accurate and as objective as you possibly can.

A sample question is given below.

A. To what extent does your job require you to work with mechanical equipment?

Very little; the job requires almost no contact with mechanical . equipment of any kind. Very much; the job requires almost constant work with mechanical equipment.

You are to circle the number which is the most accurate description of your job.

If, for example, your job requires you to work with mechanical equipment a good deal of the time – but also requires some paperwork – you might circle the number six, as was done in the example above.

If you do not understand these instructions, please ask for assistance. If you do understand them, turn the page and begin.

To what extent does your job require you to work closely with other people 1. (either "clients", or people in related jobs in your own organization)?

Very little; dealing with other people is not at all necessary in doing the job.

Moderately; some dealing with others is necessary.

Very much; dealing with other people is an absolutely essential and crucial part of doing the job.

2. How much autonomy is there in your job? That is, to what extent does your job permit you to decide on your own how to go about doing the work?

Very much; the job gives me Very little; the job gives me Moderate autonomy; almost complete responsibility almost no personal "say" many things are standabout how and when the ardized and not under for deciding how and my control, but I can when the work is done. work is done. make some decisions about the work.

3. To what extent does your job involve doing a "whole" and identifiable piece of work? That is, is the job a complete piece of work that has an obvious beginning and end? Or is it only a small part of the overall piece of work, which is finished by other people or by automatic machines?

My job is only a tiny part of the overall piece of work; the results of my activities cannot be seen in the final preduct as convice. My job is a moderate-sized "chunk" of the overall piece of work; my own contribution product or service.

can be seen in the final outcome.

My job is a moderate- My job involves doing the whole piece of work, from start to finish; the results of my activities are easily seen in the final product or service.

4. How much variety is there in your job? That is, to what extent does the job require you to do many different things at work, using a variety of your skills and talents?

Very little; the job requires me to do the same routine things over and over again.

Moderate variety

Very much; the job requires me to do many different things, using a number of different skills and talents.

5. In general, how significant or important is your job? That is, are the results of your work likely to significantly affect the lives or well-being of other people?

Not very significant; the Moo outcomes of my work are not likely to have important effects on other people.

Moderately significant.

Highly significant; the outcomes of my work can affect other people in very important ways.

6. To what extent do managers or co-workers let you know how well you are doing on your job?

Very little; people almost never let me know how well I am doing. Moderately; sometimes people may give me "feedback"; other times they may not. Very much; managers or co-workers provide me with almost constant "feedback" about how well I am doing.

7. To what extent does doing the job itself provide you with information about your work performance? That is, does the actual work itself provide clues about how well you are doing - aside from any "feedback" co-workers or supervisors may provide?

Very little; the job itself is set up so I could work forever without finding out how well I am doing. Moderately; sometimes doing the job provides "feedback" to me; sometimes it does not. Very much; the job is set up so that I get almost constant "feedback" as I work about how well I am doing.

SECTION TWO

Listed below are a number of statements which could be used to describe a job.

You are to indicate whether each statement is an accurate or an inaccurate description of your job.

Once again, please try to be as objective as you can in deciding how accurately each statement describes your job - regardless of whether you like or dislike your job.

Write a number in the blank beside each statement, based on the following scale:

How accurate is the statement in describing your job?

1		2	3	4	5	6	7		
· Ver	У	Mostly	Slightly	Uncertain	Slightly	Mostly	Very		
Inaccu	rate	Inaccurate	Inaccurate		Accurate	Accurate	Accurate		
	1.	The job require	s me to use a	number of o	complex or	high-level	skills.		
	2.	The job require	s a lot of coo	operative wo	rk with oth	er people.			
·	3.	The job is arra	anged so tha from beginnin	t I do no t h g to end.	ave the ch	ance to do	an entire		
	4.	Just doing the to figure out he	Just doing the work required by the job provides many chances for me to figure out how well I am doing.						
	5.	The job is quite	e simple and i	repetitive.					
	6.	The job can b talking or chec	e done adequ king with oth	uately by a her people.	person wo	rking alone	- without		
	7.	The supervisor "feedback" abo	The supervisors and co-workers on this job almost never give me any "feedback" about how well I am doing in my work.						
	8.	This job is one the work gets	This job is one where a lot of other people can be affected by how well the work gets done.						
	9.	The job denies in carrying out	The job denies me any chance to use my personal initiative or judgment in carrying out the work.						
	10.	Supervisors of job.	ten let me kr	now how wel	l they thin	k I am perf	orming the		
<u></u>	11.	The job provid I begin.	es me the ch	ance to com	pletely fin	ish the pie	ces of work		
	12.	The job itself performing we	provides ve 11.	ery few clu	es about ·	whether or	not I am		
·	13.	The job give freedom in ho	s me consi w I do the wo	derable opp rk.	ortunity f	or indeper	idence and		
	14.	The job itself	is not very si	ignificant or	important	in the broa	der scheme		

of things.

SECTION THREE

Now please indicate how you personally feel about your job.

Each of the statements below is something that a person might say about her or his job. You are to indicate your own personal feelings about your job my marking how much you agree with each of the statements.

Write a number in the blank for each statement, based on this scale:

How much do you agree with the statement?

1	2	3	4	5	6	7		
Disagree Strongly	Disagree	Disagree Slightly	Neutral	Agree Slightly	Agree	Agree Strongly		
 I.	It's hard, on this job, for me to care very much about whether or not the work gets done right.							
 2.	My opinion of myself goes up when I do this job well.							
 3.	Generally speaking, I am very satisfied with this job.							
 4.	Most of the things I have to do on this job seem useless or trivial.							
 5.	I usually know whether or not my work is satisfactory on this job.							
 6.	I feel a great sense of personal satisfaction when I do this job well.							

- 7. The work I do on this job is very meaningful to me.
- I feel a very high degree of personal responsibility for the work I do on this job.
- 9. I frequently think of quitting this job.
- 10. I feel bad and unhappy when I discover that I have performed poorly on this job.
- 11. I often have trouble figuring out whether I'm doing well or poorly on this job.
- 12. I feel I should personally take the credit or blame for the results of my work on this job.
- 13. I am generally satisfied with the kind of work I do in this job.
- 14. My own feelings generally are **not** affected much one way or the other by how well I do on this job.
 - 15. Whether or not this job gets done right is clearly my responsibility.

SECTION FOUR

Now please indicate how satisfied you are with each aspect of your job listed below. Once again, write the appropriate number in the blank beside each statement.

How satisfied are you with this aspect of your job?

1	2	3	4	5	6	7
Extremely Dissatisfied	Dissatisfied	Slightly Dissatisfied	Neutral	Slightly Satisfied	Satisfied	Extremely Satisfied

- The amount of job security I have.
- 2. The amount of pay and fringe benefits I receive.
- 3. The amount of personal growth and development I get in doing my job.
- 4. The people I talk to and work with on my job.
- 5. The degree of respect and fair treatment I receive from my boss.
- 6. The feeling of worthwhile accomplishment I get from doing my job.
 - ____ 7. The chance to get to know other people while on the job.
 - 8. The amount of support and guidance I receive from my supervisor.
- 9. The degree to which I am fairly paid for what I contribute to this organization.
- 10. The amount of independent thought and action I can exercise in my job.
- 11. How secure things look for me in the future in this organization.
- 12. The chance to help other people while at work.
- 13. The amount of challenge in my job.
- 14. The overal quality of the supervision I receive in my work.

SECTION FIVE

Now please think of the other people in your organization who hold the same job you do. If no one has exactly the same job as you, think of the job which is most similar to yours.

Please think about how accurately each of the statements describes the feelings of those people about the job.

It is quite all right if your answers here are different from when you described your **own** reactions to the job. Often different people feel quite differently about the same job.

Once again, write a number in the blank for each statement, based on this scale:

How much do you agree with the statement?

1	Z	2	4)	6	/				
Disagree Strongly	Disagree	Disagree Slightly	Neutral	Agree Slightly	Agree	Agree Strongly				
 1.	Most People on they do the job	Most People on this job feel a great sense of personal satisfaction when they do the job well.								
 2.	Most people on	Most people on this job are very satisfied with the job.								
 3.	Most people on	Most people on this job feel that the work is useless or trivial.								
 4.	Most people or the work they o	Most people on this job feel a great deal of personal responsibility for the work they do.								
 5.	Most people or performing the	Most people on this job have a pretty good idea of how well they are performing their work.								
 6.	Most people on	Most people on this job find the work very meaningful.								
 7.	Most people on this job feel that whether or not the job gets done right is clearly their own responsibility.									
 8.	People on this	job often thir	nk of quittin	g.						
 9.	Most people o have performe	n this job fe d the work po	el bad or ur borly.	nhappy whe	en they fi	nd that the	ey			
 10.	Most people or a good or a bac	n this job hav J job.	e trouble fig	uring out w	vhether tl	ney are doir	ng			

SECTION SIX

Listed below are a number of characteristics which could be present on any job. People differ about how much they would like to have each one present in their own jobs. We are interested in learning how much you personally would like to have each one present in your job.

Using the scale below, please indicate the degree to which you would like to have each characteristic present in your job.

NOTE: The numbers on this scale are different from those used in previous scales.

4 Would having only mode: amoi (or le	like this a rate unt ess)	5	6	7 Would like having this	8	9	10 Would like having this extremely much					
	1.	High respect and	fair treat	ment from my	superviso	er.						
	2.	Stimulating and o	timulating and challenging work.									
<u></u>	3.	Chances to exerc	Chances to exercise independent thought and action in my job.									
	4.	Great job securit	Great job security.									
	5.	Very friendly co-	Very friendly co-workers.									
	6.	Opportunities to	Opportunities to learn new things from my work.									
	7.	High salary and	good fring	e benefits.								
*	8.	Opportunities to	be creati	ve and imaginat	ive in my	/ work.						
	9.	Quick promotion	s .									
	10.	Opportunities fo	r personal	growth and dev	velopmen	t in my je	ob.					
	11.	A sense of worth	while acc	omplishment in	my work							

SECTION SEVEN

People differ in the kinds of jobs they would most like to hold. The questions in this section give you a chance to say just what it is about a job that is most important to you.

For each question, two different kinds of jobs are briefly described. You are to indicate which of the jobs you personally would prefer - if you had to make a choice between them.

In answering each question, assume that everything else about the jobs is the same. Pay attention only to the characteristics actually listed.

Two examples are given below.

JOB A			JOB B			
A job requiring mechanical equip of the day	work with oment most		A job requiring work with other people most of the day			
Strongly Prefer A	2 Slightly Prefer A	 Neutral	Slightly Prefer B	5- Strongly Prefer B		

If you like working with people and working with equipment equally well, you would circle the number 3, as has been done in the example.

Here is another example. This one asks for a harder choice - between two jobs which both have some undesirable features.

	·····			
JOB A		J	OB B	
A job requiring you to ex- pose yourself to consider- able physical danger		A job loca from you family.	located 200 miles your home and y.	
Strongly Slightly Prefer A Prefer A	Neutral	Slightly Prefer B	5- Strongly Prefer B	

If you would slightly prefer risking physical danger to working far from your home, you would circle number 2, as has been done in the example.

JOB A			JO	ВВ
 A job where very good. 	the pay is		A job when considerable ity to be c innovative.	re there is e opportun- creative and
Strongly Prefer A	2 Slightly Prefer A	3 Neutral	Slightly Prefer B	Strongly Prefer B
2. A job wher often require important de	re you are ed to make ecisions		A job y pleasant peo with	with many ople to work
Strongly Prefer A	Slightly Prefer A	Neutral	Slightly Prefer B	Strongly Prefer B
3. A job in wh responsibilit to those w best work	ich greater y is given /ho do the		A job in w responsibili to loyal em have the r ity.	hich greater ty is given ployees who nost senior-
Strongly Prefer A	Slightly Prefer A	Neutral	Slightly Prefer B	Strongly Prefer B
4. A job in an which is i trouble - have to within the y	organization : In financial and might close down ear.		A job in w not allowed say whate your work or in the p be used in out.	hich you are to have any ver in how is scheduled, procedures to carrying it
! Strongly	2	 Neutral	4 Slightly	5- Strongly
Prefer A	Prefer A	incuttat	Prefer B	Prefer B

Please ask for assistance if you do not understand exactly how to do these questions.

Job Diagnostic Survey

JOB B JOB A A job where your co-5. A very routine job. workers are not very friendly Strongly Slightly Prefer A Prefer A Neutral Slightly Strongly Prefer B Prefer B Prefer A Prefer A A job which prevents 6. A job with a supervisior who is often very criyou from using a tical of you and your number of skills that work in front of other you worked hard to people develop ----- 4----- 5-Neutral Slightly Prefer A Slightly Strongly Prefer B Prefer B Strongly Prefer A 7. A job with a supervisor A job which provides who respects you and constant opportunities treats you fairly. for you to learn new and interesting things Slightly Strongly Prefer B Prefer B Strongly Slightly Neutral Prefer A Prefer A 8. A job where there is a A job with very little real chance you could chance to do challengbe laid off . ing work. Neutral Slightly Strongly Prefer B Prefer B Slightly Prefer A Strongly Prefer A

.

-

JOB A 9. A job in which a real chance fo develop new sk advance in the ization	there is or you to kills and organ-		JO A job whi lots of va and an exce benefit pact	B B ch provides cation time ellent fringe kage.
Strongly Prefer A	2 Slightly Prefer A	3 Neutral	Slightly Prefer B	Strongly Prefer B
 A job with litt dom and indep to do your wor way you think b 	tle free- bendence k in the est		A job wher ing conditio	e the work- ns are poor.
Strongly Prefer A	Slightly Prefer A	3 Neutral	Slightly Prefer B	Strongly Prefer B
ll. A job with ver fying teamwork	ry satis-		A job whic to use you abilities to extent	h allows you nr skills and the fullest
Strongly Prefer A	2 Slightly Prefer A	Neutral	Slightly Prefer B	5- Strongly Prefer B
12. A job which little or no cha.	n offers llenge '.		A job wh you to be isolated workers	ich requires completely from co-
Strongly	Slightly	 Neutral	Slightly	5- Strongly

Appendix B

Nurse Characteristics Questionnaire

1. EDUCATION PREPARATION Please indicate the educational preparation that most closely describes your experience:

- Diploma (College or Hospital School)
- Diploma and one or more post-basic courses
- Diploma and one or more university courses
- Baccalaureate (basic program)
- Baccalaureate (post-R.N. program)

less than 6 months

- Other (Please Specify)
- 2. EXPERIENCE IN NURSING Please indicate the number of years that you have been employed in a nursing capacity since the time of your original registration:
 - Years of nursing experience since original registration
- 3. MATURITY Please indicate your age in the appropriate bracket:

 21 - 25 years	 36 - 40	 51 - 55
 26 - 30	 41 - 45	 56 - 60
 31 - 35	 46 - 50	 61 - 65

4. EMPLOYMENT TENURE Please indicate the length of time that you have been in your current employment.

 from 6 months to 1 year
 from 3 to 6 years

 from 1 to 3 years
 more than 6 years

5. AREA OF PRACTICE Please indicate the area in which you are presently working.

- Medical-Surgical Psychiatry
 Obstetrics Pediatrics
- Intensive Care Other (Please specify)
- 6. PATTERN OF NURSING CARE DELIVERY ON YOUR UNIT
 - Primary Nursing
 Modified Primary Nursing

 Team Nursing
 Other (Please specify)

Appendix C

Information Letter for Directors of Nursing

Director, Nursing Participating Acute Care Hospital British Columbia

Dear Director:

I am writing to confirm the possibility of involving the staff nurses in your hospital in my research. As a Masters student (Nursing) at the University of British Columbia, I am proposing this research project for my thesis.

The focus of my study is work design variables of the staff nurse position and job satisfaction among staff nurses. I am using a standardized questionnaire by Hackman and Oldham called the Job Diagnostic Survey that has been used widely in various industries and has normative data on many types of jobs including nursing jobs. This tool measures the key elements of the job, employees' experienced psychological states, employees' satisfaction with their jobs and work context and the growth need of respondents.

The design of the research is as follows:

1. Staff nurses from three British Columbia hospitals will be asked to fill out a questionnaire. This questionnaire asks respondents to rate on a scale various aspects of their job and their reaction to it. The questionnaire takes approximately 25 minutes to complete.

2. I anticipate being present to administer the questionnaires so that any concerns can be addressed immediately. I would make myself available in the hospital or other designated place at times convenient to the hospital and the staff nurses. For example, I could be available at the different working shifts for one or two days as might be necessary. I anticipate collecting the data in June or early July of this year.

3. I do not have a prerequisite number of nurses in mind, but would appreciate as many as possible.

4. Taking part in the research would be entirely voluntary. Respondents do not provide any identifying information about themselves and thus, confidentiality is maintained. Respondents will be asked to provide information on their length of current employment, their length of nursing work experience and their area of work, eg. medical, surgical, paediatric etc.

I appreciate your interest in my research and look forward to further discussions.

Yours sincerely,

Janet Walker R.N., B.S.N.

Appendix D

Information Letter for Staff Nurses

Dear Staff Nurse

My name is Janet Walker. I am a graduate student in nursing at the University of British Columbia, and I am carrying out a research project for a Master's thesis. I am requesting participants to complete a questionnaire in order to assist me in learning more about job satisfaction for the staff nurse.

This study is designed to assess staff nurses' reactions to various aspects of their work. The findings of this study will provide additional information that may be helpful in considering the nature of work for staff nurses.

As you are a registered nurse working full-time in a general duty staff position, I am asking for your participation in this study. You will not be required to identify yourself anywhere on the questionnaire and all information from the questionnaire will be kept confidential. After my analysis, the questionnaires will be destroyed. The results will be in the form of a research report so that no individual responses can be identified. A copy of the research report will be provided to the hospital in which you presently work and be made available to you for your interest.

The questionnaire will require approximately 20-25 minutes of your time. The completion of the questionnaire will be taken as your consent to participate in the study. Participation in this study is wholly voluntary and any refusal to participate or to withdraw at any time will in no way jeopardize your present employment.

I will be at your hospital within the next few weeks to administer the questionnaire and I hope that it is possible for you to participate. The Head Nurses and Nursing administrators of your hospital have been kind enough to assist in this study and will be suggesting times that might be most convenient for you. They have also made themselves available for your questions if you would like to discuss the study with them.

I am also available for any questions or concerns regarding this study or your participation in it. Please feel free to contact me at this address or telephone number:

(Personal data removed for reasons of privacy.)

Sincerely, Janet Walker R.N., B.S.N.
Appendix E

Letter of Consent

The following questionnaire is presented for completion by those participants who wish to take part in my research study entitled, <u>Job</u> <u>Satisfaction Among Hospital-Employed Nurses</u>.

The purpose of this study is to investigate the responses of hospitalemployed nurses to their jobs and to identify relationships between job satisfaction, various job characteristics, and employment characteristics. It is anticipated that the findings of this study will provide direction about how job satisfaction for hospital-employed nurses can be increased.

The questionnaire requires approximately 20-25 minutes to complete. The completion of the questionnaire will be taken as consent to participate in the study. The completion of this questionnaire represents the entire extent of participation requested.

Participation is wholly voluntary. Any refusal to participate or to withdraw at any time will not in any way affect the participant's employment status.

Participants will not be asked to identify themselves in any way on the questionnaire, and all questionnaires will be destroyed after analysis.

Any questions or concerns regarding this questionnaire or participation in this study may be directed to the research investigator:

Janet H. Walker R.N., B.S.N. (Personal data removed for reasons of privacy.)