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The Relationship Between the Characteristics of Nursing Care Delivery Systems  
and

Work-Motivation, Satisfaction, and Intent to Leave

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A thesis submitted to the Faculty of Graduate Studies and Research  
in partial fulfillment of the requirement of the degree of Ph.D.

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### Abstract

#### The Relationship Between the Characteristics of Nursing Care Delivery Systems and Nurses' Work Motivation, Satisfaction, and Intent to Leave

The purpose of the study was to describe the relationship between motivation, job satisfaction, characteristics of nursing care delivery systems, and intent to leave, and to consider the applicability and usefulness of the Job Characteristics Model (JCM) of work motivation to the work of nursing in four McGill University teaching hospitals.

The population consisted of over four hundred nurses who work in medical surgical units of four McGill University teaching hospitals. A total of one hundred and fifty-nine useable questionnaires were collected for a response rate of 40% .

Respondents were full and part time nurses with an average age of 36 years and eight years of nursing experience. More than 90% of the nurses reported primary nursing/total patient care to be the model in use. However, the variations in the attributes of delivery systems within that one model attest to the variations that exist within models. Feedback, communication, support for autonomy and time on patient care contributed to the development of the internal psychological states.

The proposals of the Job Characteristics Model were generally supported by the data. The psychological states, referred to by Hackman and Oldham as the causal core of the model, mediated between the core job characteristics and the outcomes. The factors of autonomy, significance and meaningfulness of the work of nursing played an important role in nurses' perceptions of their jobs.

Work environment and work content were more strongly related to an intent to

leave than external or individual factors. General satisfaction increased and intent to leave decreased as the patient environment became less complex.

There were no differences in the study findings according to education, but job satisfaction was higher for nurses with more than ten years of experience and for those who were 50 years of age or older.

Findings supported the utility of the JCM as a model of work motivation and satisfaction for nurses. The addition of specific attributes of support for autonomy, exchange of information, and inclusion of environmental complexity contributed to a fuller understanding of the factors in nursing related to motivation and satisfaction, and led to the development of a revised model of job characteristics for nursing.

## Résumé

### La relation entre les caractéristiques du système de soins infirmiers et la motivation des infirmières au travail

Le but de l'étude est de décrire le lien entre la motivation, la satisfaction au travail, les caractéristiques du système de soins infirmiers et l'intention de quitter son emploi, et de considérer l'applicabilité et l'utilité du Modèle des Caractéristiques du Travail (MCT) pour expliquer de la motivation au travail à la tâche d'infirmière dans quatre hôpitaux universitaires affiliés à l'Université McGill.

La population est composée de plus de 400 infirmières travaillant dans l'unité de chirurgie de quatre hôpitaux. Un total de 159 questionnaires utilisables ont été recueillis, donc représentant un taux de réponse de 40%. Les personnes interrogées sont des infirmières travaillant à plein ou à temps partiel, âgées en moyenne de 36 ans et ayant en moyenne 8 ans d'expérience. Plus de 90% des infirmières de l'étude signalent que les soins infirmiers de première ligne auprès du patient sont la méthode de soins utilisée. Toutefois, les variations des attributs du système de distribution à l'intérieur de ce modèle démontrent les variations existant entre les modèles. Le feedback, le fait d'encourager l'autonomie et le temps passé aux soins du patient contribuent au développement d'états psychologiques internes.

Les prémisses du Modèle des Caractéristiques du Travail ont été généralement confirmées par les données. Les états psychologiques, auxquels Hackman et Oldham se réfèrent comme étant le noyau causal du modèle, agissent comme médiateurs entre les caractéristiques centrales du travail et ses conséquences. Les facteurs d'autonomie, de

signification et d'importance du travail d'infirmière jouent un rôle important dans les perceptions qu'ont les infirmières par rapport à leur travail.

L'environnement au travail ainsi que le type de travail sont davantage reliés à l'intention de quitter son emploi qu'à des facteurs d'ordre externe au individuel. La satisfaction générale augmente et l'intention de quitter diminue au fur et à mesure que l'environnement du patient devient moins complexe.

Selon des données de l'étude, il n'y a pas de différence dans les facteurs démographiques d'éducation. Toutefois la satisfaction au travail est plus élevée chez les infirmières ayant plus de 10 ans d'expérience et chez celles âgées de 50 ans ou plus.

Les résultats supportent l'utilisation du MCT comme étant un modèle de motivation au travail et de satisfaction chez les infirmières. L'ajout d'attributs spécifiques quant au soutien de l'autonomie et à l'échange d'informations ainsi que l'inclusion de la complexité environnementale contribuent à une compréhension plus complète des facteurs reliés à la motivation et à la satisfaction chez les infirmières et a permis le développement d'un modèle révisé des caractéristiques du travail chez les infirmières.

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## Chapter 1

### Problem Statement and Introduction

#### Perspective on Work in General

There are several different perspectives on work and how to improve productivity and job satisfaction in today's society. The single basis on which they rest has generally achieved widespread acceptance; namely, we know that jobs affect people and people affect job outcomes. We also know that our capacity to measure and understand that relationship has been limited. People work to achieve positive work and personal outcomes when motivation to work is present. A motivated worker is defined as one who directs his or her behaviour toward appropriate outcomes.

The attitudes and the motivation that workers have about their jobs constitute the means by which job satisfaction and productivity are achieved. Over the last seventy years since Taylor's work with scientific management, research has explored the question of the relationship between the characteristics of the work and the worker's motivation, satisfaction and job outcomes. As early as the 1950s, Argyris (1955) and Herzberg (1959) advocated enlarging and enriching jobs to make them more meaningful and reduce the rate at which employees leave their jobs. Subsequent research by Turner and Lawrence (1965), Hackman and Lawler (1971), and Hackman and Oldham (1975) specified a relationship between job dimensions, motivation and personal outcomes. These outcomes were found to be influenced by the interaction between the psychological work needs of the employee and the job.

Senge (1990) quoted business leaders who illustrated the kind of thinking that

many organizations are now attempting to adopt:

Whether it is research and development, company management, or any other aspect of business, the active force is people. If the employees themselves are not sufficiently motivated to challenge the goals of growth and technological development... there will simply be no growth, no gain in productivity, and no technological development... The fundamental task of the organizations of today is to provide the enabling conditions for people to lead the most enriching lives they can (p.126).

### Perspective on Work in Nursing

The bottom line for any organization is how successful it is in the production of its goods and services. Health care and hospitals in particular are in the business of promoting health for its clients, whether they are individuals, families or communities. Focusing directly on finding out how quality of care and client outcomes can be improved should be the major focus of research in nursing and health care, although economic restrictions make such a focus difficult. Health, quality of care and positive outcomes for clients are complex phenomena to measure; they are affected by a multitude of factors, many of which we believe are beyond our influence to control and our ability to research. Researchers in health care are learning how to overcome the difficulties in such research; consequently client outcome research is expected to increase.

Meanwhile, at some point in any study of client outcomes, the impact of dissatisfied nurses appears. When nursing was not threatened by job shortages and downsizing in the hospital sector, dissatisfied nurses could and did leave their positions for others, primarily within but occasionally outside nursing. The cost of recruiting, orienting, training and providing experience to each new or replaced nurse was significant. At the present time, although nurses are staying in their jobs, the reasons for

their commitment range from positive to negative, and nurses who are poorly committed contribute poorly to the organization (Tumulty, Jerrigan, and Kohut, 1995).

The typical pattern observed in the nursing literature has linked job satisfaction to employee turnover through the mediating variable of intent to quit, and has infrequently linked motivation to turnover through job satisfaction. Turnover remains a potential concern for nursing but other ramifications of job dissatisfaction that impinge on patient outcomes are now receiving needed attention.

In the health care sector nurses represent the largest group of employees. Hospitals, however, where over 80% of nurses are employed, have placed little emphasis on how to redesign the work of nursing to improve job motivation, satisfaction and to reduce turnover. The sparsity of study on the work environment for nurses in hospitals is believed to be related to a lack of agreement on a definition, its operationalization, and its analysis (Chambers, 1990).

Continuing low levels of worker motivation are a source of concern to both administrators and practising nurses. Although there is little consensus on how to achieve a long term solution to the crisis in health care caused by the changing fiscal and social environment, there is agreement that major structural changes in job design are needed to create a better work world which will foster high performance in professional nursing practice (Glouberman and Mintzberg, 1992).

A suggested method of improving productivity in a meaningful way in hospital nursing is to (a) restructure nurses' jobs so that they are designed to fit the individuals' professional training and aptitudes, and (b) restructure the entire patient care delivery



system. These are hand-in-hand goals (Henderson and Williams, 1991). Changes in the components of the work environment most salient to nursing will need to be implemented concurrently with larger organizational improvements.

### Nursing Care Delivery Systems

The format used to deliver patient care is referred to as a practice model or a nursing care delivery system. Nursing care delivery systems are frameworks to structure and organize the work of nursing designed to the characteristics of the individual unit and/or agency where the care is provided (O'Brien-Pallas, Baumann, and Villeneuve, 1994).

Glouberman and Mintzberg (1992) used the words care, cure, control and community to describe the worlds of the health system. Care, by which is meant the maintenance or amelioration of the patients' condition or the restoration to wellness, is provided by the nursing units of the hospital where nurses manage the care of patients. Care is focused on the basic operating unit of the hospital, the nursing unit or ward. Glouberman and Mintzberg asserted that hospitals tend to differentiate sharply between care and cure, the former ostensibly supportive of the latter, with the nurses who are expected to do most of the caring likewise subordinate to the doctors who consider themselves solely responsible for the curing (p.3).

The same authors stated that the four worlds of care, cure, control and community are all necessary, yet separated by incompatible agendas, irreconcilable structures, and inconsistent metaphors. They assert that what is needed on the nursing units is more informed community, more direct control, more connected cure, and more empowered

care (p.30). To the extent that a system of nursing care delivery allows the above factors to coexist and work motivation and work outcomes improve, an instrument that links motivation, satisfaction and the characteristics of work should demonstrate that relationship.

Little research has been carried out on the links between a job characteristics model based on work motivation-performance-satisfaction, and the practice models of nursing. Nursing practice models deal with the endpoint of how patient care can be efficiently and effectively delivered rather than how the model itself affects nurses' work satisfaction outcomes. The important task of determining which models or which characteristics of nursing models are most likely to provide positive personal and work outcomes in relation to the motivating characteristics of the work has not yet been accomplished. There are no standardized, commonly accepted ways of defining nursing care delivery models. An analysis of certain attributes of models may be a necessary prerequisite to the development of a common language that reflects job characteristics that are related to worker motivation.

#### Aims of the Study

The present study attempts to clarify the extent to which job characteristics known to improve worker motivation, performance and satisfaction according to Hackman and Oldham (1980) are present in nursing practice models, and the extent to which they are related to the outcomes of motivation, intent to leave and job satisfaction. This research seeks to test the relationship between the characteristics of the work of nursing in hospitals, the characteristics of practice models, and motivation, satisfaction and turnover.

Currently, turnover is a restricted possibility for nurses and will therefore be assessed by the intent to leave.

The Job Characteristics Model (Hackman and Oldham, 1980) will be used as a framework for the concepts of motivation, performance and satisfaction, and a framework designed for this study will be used to identify components of nursing practice models that are conceptually related to the outcomes of motivation and satisfaction.

#### Significance of the Study

One factor in the previous equation of job motivation and its relationship to turnover has changed; nurses no longer have the option of changing their working conditions by changing jobs. Somewhere along the journey, when researchers are able to focus directly on how to improve client outcomes, the impact of unmotivated, dissatisfied nurses will continue to be felt.

The resulting situation is potentially more critical to health care than previously when turnover was possible. Dissatisfied nurses are unlikely to contribute with full effectiveness, and quality of care and patient outcomes may be jeopardized. The cost in recruitment and retention of nurses may have been reduced; unfortunately, it may have been replaced by other costs that are measured in terms of quality of care, client outcomes, and quality of working life.

Since research (Cavanagh, 1989; Irvine and Evans, 1992; Weisman and Nathanson, 1985) has shown that nurses' satisfaction with their work environment impacts on performance, client outcomes and turnover, it is important to analyse how nurses are motivated to deliver care in the work environment before restructuring takes

place. Major questions remain about how best to recognize what it is in the work environment that fosters nurses' motivation, performance and satisfaction. The model of care delivery chosen by the institution and/or the nursing directorate can potentially enhance or inhibit many correlates of job motivation for nurses.

Although problems in the health care system are enormous in number and scope and extend far beyond the nursing shortage, problems in the latter domain have a pervasive effect. If some of the reasons for nursing shortages and dissatisfaction are related to the nature of the work of nursing in its current form, then as always, diagnosis must precede treatment. There are implications for policy makers and educators resulting from an analysis of the work situation. Administrators of nursing units may wish to modify or strengthen existing management practices while hospital and nursing directors may reevaluate broader based procedures and policies. It seems important to determine the applicability of the job characteristics model to the work of nursing. The providers as well as the consumers of health care can only benefit.

Before workplaces can be redesigned to meet the needs of nurses, it is crucial to analyse the current work settings and models of practice in a systematic manner. In the present study, a framework is developed to identify the components of nursing practice models that are thought to contribute to good outcomes. This area of study is relatively new and consequently no frameworks have been located. Testing the relationship between the characteristics of models of nursing practice, job motivation and job characteristics through the use of the dominant accepted theoretical framework, the Job Characteristics Model, can provide a thorough analysis that may lead to effective job redesign where

needed.

### Conceptual Basis of The Study

#### Motivation

For the purposes of the study, motivation is accepted as the most central concept guiding worker behaviour. According to most definitions, there are three basic components to motivation; the activation, the direction, and the sustenance of human behaviour. Motivation provides the psychological foundation for the development of human competence in everyday life, and is regarded as a direct cause of behaviour. Motivation contributes to good work, and satisfaction results from good work. Motivated individual choice behaviour is also known as work motivation, of which the two most common outcome variables are job satisfaction and job productivity.

There are content and process theories of motivation. Content theories study the factors that serve as motivators of behaviour, while process theories examine how these factors motivate individuals. In organizations, motivation is affected differentially by a wide variety of variables, thus giving support to a process theory perspective of motivation. Variables such as attitudes toward the job arise from the individual, others arise from the characteristics of the job, and still others, from the environment of the organization and job setting itself and from a dynamic interrelationship among them. From a systems perspective these variables illustrate the appropriateness of a process theory of motivation (Locke and Latham, 1990).

#### Job Satisfaction

Job satisfaction arises from work motivation and appears to be clearly related to

the extent to which workers like their work; ultimately, if they do not like their work they tend to under perform and form the intention to leave the organization, and may be less likely to contribute sufficiently to the goals of the organization.

In efforts to understand the basis of job satisfaction and to reduce the negative impact caused by job dissatisfaction, numerous studies have been carried out on this subject. In 1992, Irvine and Evans conducted a meta-analysis of studies that identified factors contributing to job satisfaction and concluded that many correlates of job satisfaction exist. A meta-analysis by Blegen (1993) reported similar findings.

Factors related to job satisfaction reported in the literature included: autonomy, recognition, stress, commitment, routinization, participation, communication, pay, opportunities for promotion, integration, role overload, professionalism and kinship responsibility, centralization, and distributive justice. Common complaints included a lack of respect, no opportunity to grow, lack of influence on decision making, no control over one's own practice or circumstances, limited time with patients, and too much paper work (National Commission on Nursing Implementation, USA, 1987).

In an ideal situation the goals of the organization and the goals of the nurse would be met in the same work environment, but complaints by practising hospital-based nurses are frequent and generally consistent across work sites, reflecting the discrepancy in the two sets of goals.

Job productivity, however, has been only weakly, if at all, related to job satisfaction, and is not part of work motivation models for the following reason: Job satisfaction, from a motivational perspective, occurs when the worker successfully attains

his own individual personal goals, whereas job productivity reflects the successful attainment of the organization's goals. The low or negative correlation between these two variables suggests a lack of congruence between them. Although the two sets of goals do not need to be identical, the job must afford the attainment of the worker's core personal work goals in addition to the achievement of the organization's goals to achieve job satisfaction.

It has been proposed by Landeweerd and Boumans (1994) that the model by which nurses deliver care on their work units can enhance or inhibit many of the sources of job satisfaction and dissatisfaction for nurses. There is a felt need to identify what in the practice models contributes to job satisfaction through the development of work motivation.

### Turnover

Turnover is the cessation of employment in an organization due to quitting, dismissal, retirement, or death, and is a major organizational phenomenon (Mobley, 1979). Turnover for the purposes of this study refers specifically to voluntary turnover that is initiated by the employee and defined as the movement across the internal or external membership boundary of an organization. Although turnover can have positive outcomes for the organization, it is potentially expensive and usually unwanted. For hospitals, there is a recurrent and pervasive fear of the impact of inadequate numbers of experienced nurses to meet the increasing demand for health care services, and a recognition that dissatisfied nurses cannot contribute sufficiently to quality patient care (Tumulty, Jernigan, and Kobut, 1995).

Turnover can be studied from a number of perspectives: economic, psychological, sociological, and moral. Although each of these perspectives has been treated individually in research studies, the economic perspective has received the greatest attention because morality, emotion, and social bonds are all included in explaining economic behaviour (Etzioni, 1964). However, this study explores the factors influencing turnover that are within the realm of control of the organization at a micro level, and not those factors controlled by society.

The theoretical framework which has arisen from the research literature treats turnover as an instance of motivated individual choice behaviour to be predicted through models of various antecedents such as job satisfaction. Specifically, the model of nursing turnover which has been tested by Prescott (1986) found strong correlations between a worker's intent to leave the workplace and factors within the control of the organization which are related to the nature of the job. An intent to leave has been shown to be the strongest determinant which influences the behaviour of turnover (Irvine and Evans, 1995).

### Theoretical Models

#### The Job Characteristics Model (JCM)

A report from New Brunswick (Applied Management Consultants, 1988) that was representative of the discussion of work life issues across Canada stated:

There is not a shortage of nurses... Rather, there is a shortage of nurses willing to work under the conditions that prevail in some settings. Maintaining the rigid approaches...will contribute to more practising nurses opting out of practice or choosing different work places and will discourage inactive nurses from re-entering practice" (pp. 77-78).



It is apparent that issues of motivation and satisfaction have been interchanged in discussions on the job characteristics of nursing that reduce turnover. Therefore, a process theory that organizes the factors of motivation, performance, and satisfaction comprehensively in a systematic way will provide the most comprehensive approach to work motivation. The Job Characteristics Model (Hackman and Oldham, 1975) combines the divergent factors of motivation, performance and satisfaction in a meaningful way. Research in nursing related to turnover has focused primarily on job satisfaction and not on motivation, although it has been recognized that motivation provides the force by which performance is achieved, and satisfaction is derived from performance. The Job Characteristics Model (JCM) by Hackman and Oldham (1975) met basic criteria for applicability, validity, reliability and a sound theoretical basis in a review of measurement approaches to occupational experiences which reviewed over 200 measures of work attitudes (Cook, Hepworth, Wall, and Warr, 1981). The JCM remains the most used and highly regarded model and theoretical construct used in the area of work design (Hart, 1990). Hackman and Oldham (1980) have clearly delineated components of motivational theory and work context that appear to be related to some of the problems that influence nursing turnover. Although the job characteristics and design strategies have not yet been extensively tested for their applicability to the work of nursing, particularly in relation to the various practice models, the literature lends significant support to its potential applicability.

#### Nursing Practice Models

A variety of configurations of nursing practice models exists. We lack a

meaningful way to describe them because each model of care delivery uses its own structural design attributes to determine how the work of nursing is divided and coordinated (Allred et al., 1994).

The nursing practice models that are most commonly in place in hospitals are functional nursing, team nursing, total patient care, primary care nursing, modular nursing, shared governance, and case management, or a combination of these. The names given to the models do not necessarily describe their structure and function, and similarities and differences abound in no apparent order between the various models. Some natural divisions are not taken into account in analysing the different models. For example, it is clearly evident that tasks are either nursing (professional) or non-nursing (non-professional) designated; similarly, tasks may be differentiated according to whether they are patient (direct) care or functional (non-direct) care. The most important division concerns whether the work is considered to be patient related.

#### Development of a Framework to Analyse Practice Models

It is necessary to have a framework to analyse practice models to identify which components of practice models are related to the characteristics of work that lead to motivation, satisfaction and low turnover. Such a framework should be comprehensive, grounded in findings and theory from research where possible, and include factors that can be readily operationalized for use across settings.

The framework shown in Figure I has been developed specifically for the present study to determine the presence or absence of characteristics of certain core nursing job dimensions which are related to a process theory on work motivation and which may

complement the job characteristics found in the JCM. The framework was developed from reviews of the literature on motivation, job satisfaction, quality of working life (QWL), and factors affecting patient outcomes.

---



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Preference for Task Divisions  
Support for Autonomy  
Satisfaction with Communication  
Complexity of the Patient Population

---



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Figure 1. Framework for the Analysis of Nursing Practice Models that Impact on Job Satisfaction

From the literature on quality of working life, two frameworks were chosen for their potential to examine practice models (Baggs et al., 1992; O'Brien-Pallas and Baumann, 1992). The framework by O'Brien-Pallas and Baumann listed factors that influence the work life of nurses, and appeared to provide a useful context to explore the systems for providing nursing care in hospital settings. Their framework consists of:

1. A group of internal dimensions that focus on the nurse and the work environment, consisting of (a) the individual, (b) the social/environmental context, (c) the operations of the work setting, and (d) the administration.
2. A group of external dimensions which include factors external to the nurse and the environment in which she works. The external dimensions contain three major

factors; (a) client demand on the system, (b) health care policy, and (c) the labour market.

Certain variables in the framework are constant across nursing units in the same or even similar hospital settings, and thus they remain outside the scope of the framework subsequently developed for the present study. For example, the external factors of health care policy and the labour market would be expected to be similar across hospital nursing units. Among the internal factors, the style and function of the organization's administration are generally common to all nursing units in the same hospital. The remaining internal and external dimensions of the framework correspond to the individual and general components of the framework developed for this study.

From the literature on factors affecting patient outcomes including literature on the effects of nursing intervention research studies, a pattern emerged that tentatively links job characteristics, patient outcomes, components of practice models and nurses' motivation. Four areas were found to be critical to the link between models of care, patient outcomes, and motivation leading to job satisfaction (Baggs et al., 1992):

1. Differentiation or the degree of difference between the tasks of the nurse,
2. Communication and coordination of information exchange,
3. Decentralization or the degree of autonomy in decision making,
4. Participation or joint decision making and the sharing of information among participants in the decision making process.

An inclusive theoretical approach to the factors affecting the nurse as an individual that contributes to the development of frameworks of practice models was proposed by Stamps and Piedmont (1986). Their perspective was that work satisfaction is

dependent on the needs of the individual nurse and the intensity of those needs. The six components that comprise their model are autonomy, interaction, pay, professional status, organizational policies, and task requirements. Four of their factors are consistent with issues that are found within practice models and additionally that correspond to variables that Blegen (1993) found in a meta-analysis on job satisfaction. The four factors are autonomy, task requirements, professional status, and social interactions.

Finally, work by Allred et al. (1995) found that the type of practice environment in which the care delivery system must function must be considered as a salient factor in understanding practice models. The degree of complexity, change, unpredictability and uncertainty of the patient population can impact how care is delivered.

The above areas of the literature, in particular the work by O'Brien-Pallas and Baumann, and Baggs et al. contributed to the framework developed for the current study.

### The Purpose Of The Study

The purpose of the study is to describe the relationship between motivation, job satisfaction, characteristics of nursing care delivery systems, and turnover (intent to leave) within the work of nursing and to consider the applicability and usefulness of the Job Characteristics Model of work motivation to the work of nursing in four McGill University teaching hospitals in Montreal, Canada.

### Study questions

The specific study questions are:

1. Are the characteristics of the work of nursing related to motivation and satisfaction as measured by the Job Diagnostic Survey of the Job Characteristics Model?

2. Is there a relationship between motivation, and intent to leave and satisfaction in the work of nursing?

3. Is there a relationship between the attributes of nursing care delivery systems and motivation?

4. Are there significant differences between the means obtained on the dimensions of the JCM, the "Intent to Turnover Scale", and the demographic variables?

### Definition of Terms

Autonomy - the amount of work-related independence, initiative, and freedom either permitted or required in daily work activities;

Task requirements/divisions - those jobs that must be done as a regular part of the job divided according to categories of direct, non-direct; professional, non-professional.

Job Satisfaction - one's affective attachment to the job viewed either in its entirety (global satisfaction) or with regard to a particular aspect (facet satisfaction).

Motivation - the organized patterning of psychological functions that serve to direct, energize, and regulate goal-directed activity.

Job Characteristics - the operationalized measures of six attributes of a task related to satisfaction, according to the JCM.

Job Outcomes - the specific results of a job directly related to the nature of the job and the criteria chosen by the organization.

Nursing Practice Models - the structures and processes used to deliver patient care on an individual nursing unit.

Intent To Leave - the plan by the worker to leave the organization.

Turnover - the voluntary movement across the internal or external membership boundary of an organization that is initiated by an employee.

### Organization of the Study

This study is organized into five chapters:

Chapter 1 is devoted to an explanation of the purpose and direction of the effort as a whole. Chapter 2 provides a review of the research related to the problem under study. Chapter 3 is a discussion of the methodology and the procedures used to conduct the research. Chapter 4 reports the findings. Chapter 5 discusses the results and presents implications and suggestions for further research.

## Chapter 2

### Review Of The Literature

#### Introduction

Before the industrial revolution there would have been no need to discuss whether and how the content of a job influenced work motivation. The craftsmen of the day found their work to be intrinsically motivating and satisfying (Kanungo and Mendonca, 1994, p.96). After the industrial revolution and the subsequent decomposition of work into simplified elements, attempts were made to replace the previous inherent work motivation with other means, so that the outcomes of work would continue to include internal work motivation and satisfaction. Internal work motivation or the innate and complex drives and forces that lead to goal achievement are needed in order to foster a desire to perform well. With them, the worker can experience accompanying good feelings and job satisfaction, and without them, the worker may leave the job.

Particularly low levels of job satisfaction are reported in human service organizations such as nursing as compared with other types of organizations (Glisson and Durik, 1988). As job satisfaction for nurses suffers, so do a range of factors including nurse retention, patient satisfaction and quality of care (Tumulty, 1992).

To investigate the relationships between work motivation, job satisfaction in nursing, and the ways in which nurses deliver care, it is helpful to review the literature in these areas, particularly with a view to developing a framework to analyse nursing care delivery models. The outcome of turnover is also examined. The Job Characteristics Model is discussed and reviewed to present its selection as an appropriate theory to guide



the study. It will be shown that motivation in nursing is erroneously referred to as job satisfaction, and that little research is available on the use of the JCM in the work of nursing although its selection is popular elsewhere.

### Organization of the Chapter

Section I focuses on motivation as the chief force directing workers' behaviour. Section II focuses on a review of the Job Characteristics Model (JCM). Section III is concerned with the reasons for the need to redesign nursing work using the JCM, as explained by a review of the nursing literature that delineates the problems with job motivation and satisfaction. Section IV discusses nursing care delivery systems and the development of a conceptual framework for analysis of the characteristics of systems that are related to the Job Characteristics Model (JCM). Section V deals with turnover as an unwelcome outcome to poorly designed jobs that fail to lead to internal work motivation and job satisfaction, and may give rise to an intent to leave. Each section consists of a general discussion of related issues derived from the literature and a review of pertinent research findings.

### Section I: Work Motivation

#### Introduction

Motivation is clearly one of the most central concepts guiding worker behaviour. As a concept, Ford (1992) stated that motivation provides the psychological foundation for the development of human competence in every day life. Although definitions abound, the most complete ones generally include three components; references to what arouses, directs, and reinforces behaviour. Ford defined motivation as the organized

patterning of three psychological functions that serve to direct, energize, and regulate goal-directed activity: personal goals, emotional arousal processes, and personal agency beliefs.

### Content Theories of Motivation

Over the years there have been several approaches to understanding motivation in general and work motivation in particular. The earliest approaches were referred to as content theories of motivation in that categories of needs were used to explain work motivation. Maslow's Hierarchy of Needs (1943) and Herzberg's two factor Motivation-Hygiene Theory (1959) are the best known in this category. Although research support for the two theories is scant, nonetheless, researchers learned from them that job content was as important as the satisfaction of employees' lower order needs such as security and pay, in order to motivate people at work.

During the same time period, work done by McClelland (1961) found that social needs for achievement, affiliation, and power also helped understand workplace behaviours of employees and explained workplace motivation in some circumstances.

### Process Theories of Work Motivation

Other theories of workplace motivation are referred to as process theories in that they seek to explain work motivation in terms of the individual's cognitive processes. Expectancy theory, the first process theory, was formulated by Lewin (1947) and Tolman (1932) and adapted to work motivation by Vroom (1964). In general, the underlying assumption of expectancy theory is that "...the choices made by a person among alternative causes of action are lawfully related to psychological events occurring

contemporaneously with the behaviour" (Vroom, 1964). Expectancy theory asserts that the individual makes rational choices based on his perception that he can perform in a needed manner, that his behaviour will lead to expected outcomes and that such outcomes are desirable.

Expectancy theory consists of three concepts: the valence/value which is an emotionally laden desire or preference for a certain state or outcome; the expectancy or belief about whether that state is attainable; and instrumentality or belief about whether the job activities are effective means to achieve that state, implying a responsive environment (Ford, 1992, p.182). The research on the expectancy model has shown that the strength of motivation is positively correlated with job satisfaction, effort and performance in a number of settings. Perhaps the most common criticism of the expectancy theory is that the three components should be studied separately for their impact on motivation rather than only in a multiplicative manner.

Bandura (1991) wrote that forethought about outcomes, such as beliefs concerning what one can do (self-efficacy), influences effort and performance in expectancy theory. Effort was originally seen as the sole cause of performance because the theory was concerned with how hard people work at jobs unimpeded by either obstacles or threats. When contingencies are fixed so that desired outcomes cannot be forthcoming regardless of the level of competence or performance as in poorly designed jobs, then expected outcomes are independent of expectancy. Other factors in the environment were also found to contribute to the association between motivation and performance (Feather, 1982; Schwab, Olian-Gottlieb, and Heneman, 1979).

Another process theory, equity theory, states that workers compare the inputs they invest in their jobs with both the outcomes that they receive and those of another relevant worker or group. Goal setting theory is also a process theory of work motivation, and one that is a development of some of the elements of expectancy theory. Goals are determined by an individual's knowledge, values, needs and abilities. Goal setting theory states that performance goals or intentions are immediate regulators or causes of task or work performance. Locke and Latham (1990), in reviews of the research on goal setting theory, found that people who try to attain specific and difficult or challenging goals perform better on tasks than people who try for specific but moderate or easy goals, or no goals at all.

Research support for the process theories of work motivation has been strong enough to warrant continuing investigation into this area (Miner, 1980). The process theories of work motivation are well accepted and supported in the literature. They form the basis of organizational development and management theory.

Porter and Lawler (1968) depicted the relationship between motivation and performance in a model which united current theories into a unified whole. Hackman and Oldham (1975) furthered the work by developing not only a comprehensive model of work motivation, but also a measurement tool (the Job Diagnostic Survey) to identify the various components of their model.

There is a consensus in the literature that regardless of the particular model of motivation in question, (a review by Ford [1992] listed thirty-two models or theories), motivation is a direct cause of behaviour. Therefore, the basis of most theories (including

Hackman and Oldham's) places Motivation → Performance → Satisfaction along a continuum. From a work oriented perspective, satisfaction is the result of good work and motivation contributes to good work. Job satisfaction is not a direct cause of behaviour but an outcome of it.

### The Development of the Hackman and Oldham Model of Work Motivation

(JCM) Hackman and Oldham based their model of job characteristics on the relationship between the design of jobs and worker motivation. That is, to the extent that jobs can be designed with a motivating potential so that they fulfill the worker's needs for personal growth, the worker will respond with effective performance and satisfaction in the work. The task of changing any job so that it can successfully motivate a worker depends highly on the specifics of the organization, the culture involved, and the growth needs of the worker.

Hackman and Oldham's model and theory of job characteristics arose from work by Turner and Lawrence (1965) that examined the relationships between task attributes and job satisfaction in forty-seven industrial jobs. Their findings were different for urban and rural workers. Only rural workers demonstrated a positive relationship between the two variables. From this and other research by Blood and Hulin (1967) and Hackman and Lawler (1971), the theory was developed that employees' attitudes and behaviours such as their need for personal growth and development at work were responsible for their responses to the characteristics of the job.

Hackman and Oldham referred to internal motivation in their model which, according to them, is similar in meaning to Blood's (1969) concept of "self-rewarding

behaviour." To Hackman and Oldham, internal motivation constituted rewarding and satisfying feelings and self-rewards such as are generated by one's knowledge of the results of one's efforts, the experience of a sense of responsibility for one's work, and a belief in the meaningfulness of the work. These positive feelings create a self-perpetuating positive feedback cycle of motivation → performance → satisfaction → motivation →.

Other motivational theorists whose views of internal motivation are similar to Hackman and Oldham's include Csikszentmihalyi (1990) whose "optimal experience" theory focuses on intrinsic motivation as consisting of clear and definite personal goals in the context of an optimally challenging task. He spoke of a flow experience where a sense of pleasure and focused attention arises from a sense of personal control and effectiveness.

Deci and Ryan's (1987) theory of motivation through self-determination also appears to fit closely with Hackman and Oldham's concept of internal motivation. Their perspective is that man self-determines in that he involves the self in the initiation and regulation of action to various degrees. Behaviours are described as self-determined (internal), controlled (experienced as coerced by internalized rules or standards, or by external forces, but not experienced as freely chosen), or unmotivated. Thus, in controlled behaviour there may be a sense that one is able to control the outcome and a sense that one has initiated the behaviour, but not a sense of being able to freely choose whether to perform the behaviour. In such a situation, reminiscent of the working world of Taylorism, and in severe circumstances one may feel that one is a pawn without freedom

of choice. To be truly intrinsically motivated according to Deci and Ryan is to be truly self-determined. It appears that organizations are attempting to create a scenario as similar to that state as possible to meet the challenge of economic success. It may be that a compromise between the two states is more feasible.

However, Thierry (1990) in a critique of the dichotomy between intrinsic and extrinsic motivation, said that the research base to defend this conceptualization of motivation as being intrinsic or extrinsic is almost non-existent and argues instead for an approach to motivation that considers it as affected by both personal and situational characteristics which relate interactively to one another and not as simple polar opposites. In any event, the use of the intrinsic-extrinsic split remains appropriate to distinguish between the worker's perception about whether the causes of his behaviour reside within the self or in the environment. The world of work is composed of both intrinsic worker perceptions and external conditions.

The outcome variables most closely associated with motivation in the domain of work are job satisfaction, performance, and productivity at work (Steers and Porter, 1987; Vroom, 1964). Nonetheless, high job satisfaction and high job performance were rarely strongly correlated in research on work performance (Iaffaldano and Muchinsky, 1985). Vroom (1964) and Brayfield and Rothe (1951) carried out critical reviews of the literature on motivation and job satisfaction and were among the first researchers to reveal that any relationship between the two variables was either slight or non-existent. Rather than assume that satisfaction and performance are not closely related, motivation theory suggests that there may instead be differences between how satisfaction is viewed by the

worker and the organization (Ford, 1992).

If job productivity is taken to mean that the organization has obtained its goals then worker satisfaction implies that the worker has obtained his goals. Nichols, cited in Ford (1992), found that motivation improved when a job was structured to increase the chance of the worker achieving his own personal goals. He found that certain aspects pertaining to goal attainment were predictive of job dissatisfaction when they were not met. These aspects emphasized goals such as mastery, self-determination, feedback and responsibility. The process of designing a job to encourage the achievement of these goals is possible, as described by Hackman and Oldham and the authors of many management texts (Bolman and Deal, 1991; Daft, 1989).

#### Research on Motivation in Nursing

A review of the literature on motivation in nursing over the last fifteen years has shown that nursing scholars have attempted to understand the forces that motivate nurses, and in some instances have applied specific theories to the investigation. Although motivation theorists used by nursing include Herzberg, Maslow, McClelland, and Hackman and Oldham, the JCM is the most used model in nursing. Fewer than ten studies, however, were found in the literature and they are discussed in the section on the JCM.

Using Herzberg's theory, support for the validity of five motivators and for one hygiene factor, that of salary was found in a study of three hundred and twenty-nine nurses (Munro, 1983). Maslow's theory of human motivation was used in a study of the motivational orientations and satisfactions of nurses (Mausner, 1988). The results found



that nurses were motivated by their need for self-actualization and that several work motivation dimensions were significantly correlated with the job reward/satisfaction variables.

Using McClelland's model, the need for power for nurses was not found to be as important and motivating as the needs for affiliation and achievement regardless of the job level. Power, defined as the nurse's own assessment of her ability to improve the quality of nursing care, was associated with higher motivation (Raatikainen, 1994). In a study that examined the relationships among motivational needs and job performance, the needs for achievement and affiliation were both significantly greater than the need for power and only the need for affiliation of staff nurses was significantly positively related to job performance (Sightler, 1990). Several studies (Chusmir, 1985; Medcof and Wall, 1990; Stahl, 1986) have confirmed that the need for affiliation pervades and is functional in nursing. Mowday, Steers, and Porter (1979) proposed that needs for achievement, power, and affiliation are especially crucial in the work place and further that these needs must fit with occupational setting and suitability.

Increasing levels of motivation were associated with leadership styles (Reyna, 1992), primary nursing (Bruce, 1990; Kivimaki, Voutilainen, and Koskinen, 1995), and the recognition of excellence through the use of clinical professional advancement ladders (Bruce, 1990; Fickner, 1992; Sovie, 1989; Staring, 1995). The Job Diagnostic Survey (JDS) discriminated between nurses who either participated or did not in available clinical ladder programs (Thornhill, 1991). Issues of professionalism, which can be described as a recognition of the value of nursing with its achievements, are found as a

thread in several articles, underscoring the motivation of nursing as being an altruistic and caring career. Aspiring to a traditionally female service career in nursing was associated with higher levels of work motivation (Fickner, 1992; Muldoon and Kremer, 1995).

Challenging goals in the form of specific amounts of work to be completed within a specific time frame with a high degree of responsibility are a daily fixture within the work of hospital nursing. The presence of a challenge, however, does not guarantee high performance unless several other factors are also present. Individual ability moderates responses to goals (Locke and Latham, 1984). Commitment to a goal affects goal setting and is itself affected by other factors including a sense of expectancy. Individuals usually prefer goals that are moderately difficult (Locke et al., 1980).

The level of motivation among nursing staff did not have an effect on patient satisfaction in a nursing study that examined nurse manager leadership style and motivation among nursing staff (Reyna, 1992). However, one study found that motivation was instrumental in clinical nurse specialists' achievement of expertise in clinical practice (McGregor, 1990) and another found that motivation was specifically instrumental through the use of clinical professional advancement ladders (Fickner, 1992; Staring, 1995).

There is a sparsity of nursing literature specifically directed to motivation; however, many of the articles on job satisfaction appeared to be measuring aspects of motivation. Irvine and Evans (1995), in a meta-review on job satisfaction and turnover among nurses, commented that work content and work environment variables appeared to have a stronger relationship with satisfaction than did either the economic or individual

variables. The work variables, moreover, consisted of items related to motivation, such as job design and appropriate leadership. In fact, the same authors discussed the suitability of Hackman and Oldham's work in job redesign to promote internal work motivation, and recommended ways of making jobs more meaningful and rewarding.

The process theories of motivation on which the JCM is based appear to explain in a satisfactory way the interactions between motivation, performance, and satisfaction in the work setting. Motivation may be a complex construct; it is nonetheless useful, powerful, and effective. The use of the JCM in a research study in nursing may help to delineate the real differences between variables that are found to be job satisfiers and the conditions of work that lead to motivation.

There appeared to be a tendency to use terms of reward, recognition, and job satisfaction interchangeably and as a substitute for motivation in the nursing literature under review. This confusion prevents a clear and useful understanding of the motivational process. For example, Mottaz (1988) in a research study that looked at work satisfaction among hospital nurses stated that intrinsic task rewards consistently and powerfully predicted overall work satisfaction, and that the nature of the task primarily determined one's attitude toward work. Although motivation is clearly a focus of this study, the term does not appear in the article.

Disciplines other than nursing have also suffered from this lack of clarity and several researchers in the field of motivation have recommended actions to improve the theoretical basis of studies in general. Gruneburg (1979) maintained that a broader research base would clarify inconsistent findings as a better understanding is gained about

the complex nature of human behaviour. Miskel (1982) also advocated the use of a strong theoretical base on which to conduct research studies in the area of job satisfaction and motivation. He suggested that the actual lack of a relationship between performance and satisfaction may be due to workers deriving job satisfaction from parts of their jobs that have little to do with productivity, such as social interactions. Locke, Frederick, Lee and Bobko (1984), however, found that aspects of the work itself are usually most strongly related to overall job satisfaction for people at higher job levels.

Locke and Latham (1990) asserted that the combination of expectancy theory and goal-setting theory was the most useful way to understand the relationship from a theoretical basis, since motivation to work and satisfaction are relatively independent outcomes, keeping in mind that job satisfaction is a result of the person in relation to the job rather than a result of either the person or the job alone. Hackman and Oldham also mentioned the joint use of work design and goal setting to improve satisfaction at work through the improvement of levels of motivation. Maehr (1987) suggested that a good manager should ask what there is about the job that either encourages or dissuades the worker from performing well and in so doing attempt to gain better insight into the factors that motivate employees.

In the majority of the studies mentioned in this section, nursing work has been treated as a single occupation; however, it seems more reasonable to assume that differences in work units will lead to differing motivational needs and outcomes. The research on work motivation and satisfaction in nursing has not considered how the way nursing care is provided influences outcomes. There is a large body of nursing literature

on various conceptual models that are used to provide direction to the delivery of patient care (Flarey, 1995). Thus, while the studies in this section explored factors affecting motivation and satisfaction in nursing and recommended efforts to improve the work environment, they failed to rigorously assess the actual characteristics of the ways by which nursing care is delivered. The present research adds to the field by studying the relationship between motivation and the presence of characteristics of work units conceptually linked to motivation.

To summarize the section on motivation, humans have a strong capacity for self-regulation and self-direction, and motivation impacts on human functioning through its ability to organize, direct, and maintain behaviour. Traditional research emphasized that it is the characteristics of jobs and not worker characteristics that are involved in the motivation process, but current thinking suggests that both factors need to be considered in research on work motivation.

## Section II: The Job Characteristics Model (JCM)

### Early Job Design Research

The only other theorist to garner as much research and study as Hackman and Oldham was Herzberg and his two-factor model of job motivation which became prominent in the late 1950s. Herzberg's Motivation-Hygiene Theory arose from this finding that factors that cause satisfaction differ from those that cause dissatisfaction. He proposed that motivators such as recognition and achievement are positive factors while hygiene factors such as policies and pay are sources of dissatisfaction. From his findings, Herzberg concluded that the hygiene factors prevent job dissatisfaction, but they do not

create satisfaction by their presence. The motivators and the hygiene factors are distinct and separate. There has been some research confirming this theory but more which has failed to do so.

In the 1960s, Turner and Lawrence (1965) began to study the very attributes of jobs and their relationship to certain outcomes such as absenteeism and satisfaction. Blood and Hulin (1967) proposed a more complex relationship where other factors intervened between the characteristics of the job and outcome variables.

#### Description of the Model

Hackman and Oldham (1975, 1976, 1980) differed from many other theorists in their approach to organizational improvement in that they stressed job change as easier to accomplish and more effective than people change. In the 1970s Hackman and Oldham developed the job characteristics model which included factors that intervened between the specific attributes of the job and its outcomes. The model states that the presence of three experienced psychological states (meaningfulness of the work, knowledge of the results, and responsibility for the outcomes of the job) will lead to motivation, satisfaction and performance. The three psychological states are affected by five characteristics of the job: skill variety, task identity, task significance, autonomy, and job feedback. The five core job dimensions can form a single score, called the motivating potential score (MPS) which reflects the complexity of the job.

Figure 2 presents Hackman and Oldham's Job Characteristics Model of Work Motivation.

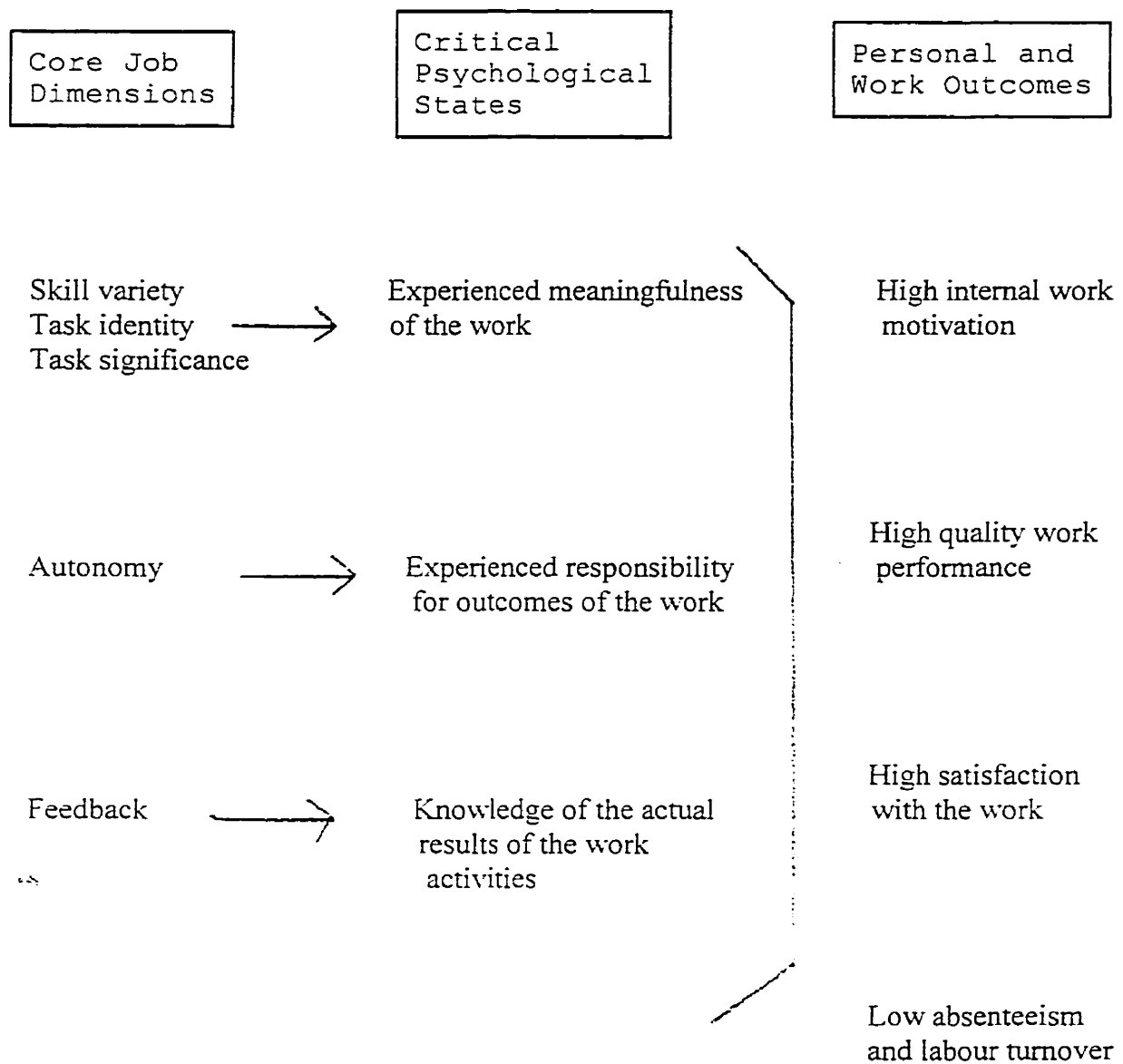


Figure 2. The Job Characteristics Model of Work Motivation (Hackman and Oldham, 1980)

Box 1 presents the definitions of variables of the core job characteristics of the JCM (Hackman and Oldham, 1980).

Autonomy:	The degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the procedures to be used in carrying it out.
Job Feedback:	The degree to which carrying out the work activities required by the job provides the individual with direct and clear information about the effectiveness of his/her performance.
Skill Variety:	The degree to which a job requires a variety of different activities in carrying out the work, involving the use of a number of different skills and talents of the person.
Task Identity:	The degree to which a job requires completion of a 'whole' and identifiable piece of work, that is, doing a job from beginning to end with a visible outcome.
Task Significance:	The degree to which the job has a substantial impact on the lives of other people, whether those people in the immediate organization or in the world at large.
Motivational Potential:	The potential of a job to foster internal work motivation on the part of the job incumbents. A job high in motivating potential must be high on at least one, and hopefully more, of the three characteristics that prompt experienced meaningfulness, and high on both autonomy and feedback as well, thereby creating conditions that foster all three of the critical psychological states.

Box 1. Measures of Core Job Characteristics (Hackman and Oldham, 1980)

The more that workers report that a job contains the five core job characteristics, and the more the worker reports that the job possesses the three psychological states, the more likely a state of high internal work motivation will exist. The individual difference variables of growth need strength, knowledge and skill, and satisfaction with the context of the job were also found to be pre-requisites for the worker before he could be motivated by the core characteristics of the job. The model links the three related sets of variables of job characteristics, psychological states, and outcomes which are in turn influenced by the three individual difference variables that moderate the relationship



between the job dimensions and the personal and work outcomes.

Growth need strength refers to the characteristics of people that allows them to respond positively to a complex, challenging job (Hackman and Oldham, 1980, p.85). Growth need strength may affect how people react to their jobs at two different points in the model: first at the link between the objective job characteristics and the psychological states and again between the psychological states and internal motivation. Thus, those with a high growth need strength will experience the psychological states more strongly when the job is high in motivating potential and they will also respond more positively to the psychological states.

Box 2 presents the definitions of the four work response variables of the JCM.

<b>General Satisfaction:</b>	Global satisfaction with the job, as reflected in items such as, "Generally speaking, I am satisfied with this job."
<b>Internal Work Motivation:</b>	The degree to which an individual experiences positive internal feelings when performing effectively on the job. A sample item is "I feel a great sense of personal satisfaction when I do this job well."
<b>Growth Satisfaction:</b>	The degree to which an individual is satisfied with opportunities for growth on the job. A sample item is "The amount of personal growth and development I get in doing my job."
<b>Context Satisfaction:</b>	Self-reports of satisfaction with job security, pay, supervision, and co-workers.

Box 2. Measures of Job Outcomes (Hackman and Oldham, 1980)

In addition to the model, Hackman and Oldham also developed a questionnaire, the Job Diagnostic Survey (JDS), to measure the variables included in their model and thus made it feasible to test the model in real situations. The JDS questionnaire is meant

to be used especially for diagnosing job characteristics for the purpose of redesigning jobs so that worker motivation, satisfaction, and performance can be improved.

The JCM includes the concept of worker challenge through the design of the work, accompanied by goals that are meaningful to the worker who has an expectancy of attaining the desired outcome, all of which leads to a level of job and worker performance that contributes to job satisfaction. Hackman and Oldham's concept of growth need strength appears to tap into a similar domain as personal goals related to work.

The JCM incorporates the following major characteristics of organizational development and design methods: a planned strategy for change, a collaborative approach, an emphasis on enhanced performance, a humanistic orientation, a systems perspective, and scientific approaches (to supplement practical experience). Since 1980 the JCM has been reviewed and critiqued by many authors who have offered both support and criticisms in relation to the fit of the model with organizational development concepts. Because the theoretical model of Hackman and Oldham has generated large numbers of research and practical applications, this model has a significant amount of rigorous research to help make sound decisions about its usefulness.

Riggs and Knight (1994) tested two models describing the theoretical relationship among the constructs of perceived group success-failure and outcome expectancy and satisfaction. They found that the model proposing a direct causal link from perceived success to the attitudinal variables produced an adequate fit between theory and data. They recommended that organizations should cultivate success experiences and ways to provide positive feedback regardless of the ability or attitudes of the worker. Their study

agreed with Carter's (1991) review of the literature in which he found that most studies attempting to identify a link between ability and satisfaction reveal non-significant or small negative relationships. Thus, individual variables were not as important as the nature of the characteristics of the job in promoting positive job outcomes.

As mentioned earlier, the JCM stresses job change rather than people change, contrary to the focus of many organizational development interventions. The difficulty with job change is that it is dependent on other forces and constraints such as political and environmental issues which are frequently outside the control of those responsible for job redesign. However, current management thinking stresses the necessity of providing workers with scope and autonomy so that they become, as Senge (1990) advocated, knowledge workers. As this concept of worker involvement gains support, it is likely to lead to a renewal of interest in the JCM as a proven way to diagnose job characteristics. Some authors have proposed that the JCM be used as a Quality of Working Life (QWL) measure (Turcotte, 1982). The quality approach to managing human resources owes much to the work of Hackman and Oldham (Petrick and Furr, 1995), and the JCM has been suggested as a predictive model of job satisfaction (Savoie and Forget, 1983). Thus, the JCM is potentially applicable to a wide variety of applications related to work in organizations.

#### Research Reviews of the Job Characteristics Model (JCM)

The JDS has been used in many job settings, allowing profiles to be constructed to compare the motivational properties of several jobs (Hackman, Oldham, Janson and Purdy, 1975). The instrument is designed to be of use both in the diagnosis of job

structures, and in the measurement of the effects of redesigned jobs.

Support for the theory and the survey tool has been generally forthcoming. Fried and Ferris (1987) carried out a meta-analysis on nearly 200 studies and reviewed the validity of the job characteristics model. They found that job characteristics were related to both psychological and behavioural outcomes, although in a generally stronger sense with psychological outcomes.

Fried and Ferris in their meta-analysis stated that job feedback is the job characteristic that seems to be best associated with the personal and behavioural outcome variables of the model. The organizational design interventions commonly referred to in the literature also stress the importance of feedback in assuring worker satisfaction. Job feedback seemed to affect all psychological states and behavioural measures. The development of this and other task dimensions could potentially be of significance to nursing.

Two studies using the concepts of the JCM illustrate some relationships between the nature of the work characteristics and worker outcomes. Campion (1988) and Campion, Medsker and Higgs (1993) looked at the relations between work group characteristics and effectiveness using job design and process themes, and interpersonal interdependence, job composition and context themes. The job design and process themes were very useful in predicting effectiveness criteria of productivity, employer satisfaction, and manager judgments.

There have been several reviews of the literature on the JCM from different perspectives. Some reviewers focused on performance and whether the JCM could

improve performance at work. Locke, Feren, McCaleb, Shaw, and Denny (1980) studied thirteen reports of job enrichment and found improvements in performance in 92% of the cases. Griffin, Welsh, and Moorhead (1981) did not find any consistent pattern to performance outcomes in a review of thirteen studies but felt that performance issues were treated and measured in such different ways across studies that comparisons were suspect. Kopelman (1985) reported an average quality improvement of 28% across twenty-one job enrichment experiments, and documented other benefits including staffing flexibility and worker retention.

Meta-analyses were carried out to examine the impact of job enrichment and job satisfaction by Loher, Noe, Moeller, and Fitzgerald (1985), and by Newman, Edwards, and Raju (1989). As Cotton (1993) stated, the reviews tended to find positive but not overwhelming links between job characteristics and job satisfaction. Weaker results typically were found between job characteristics and performance or other behavioural outcomes (absenteeism and turnover) (p.152).

Explanations for the lack of a relationship between job satisfaction and job performance were discussed earlier in the chapter and are also relevant here. There are suggestions that for the work of nursing, positive clinical outcomes have resulted from changes in job design (Knaus et al., 1986). It remains for future research to determine if the changes in outcomes are also positively associated with job satisfaction.

### Nursing Studies and the JCM

Fewer than ten studies were found in the nursing research literature that examined

the impact of motivation on satisfaction for nursing positions using the Job Design Survey, and only one compared aspects of nursing jobs in a variety of clinical areas: medical-surgical, psychiatry, pediatrics, coronary care, obstetrics-gynaecology, and combined services.

In a study by Joiner, Johnson, Chapman, and Corkrean (1982), the Motivating Potential Score (MPS), consisting of the five core job characteristics for nursing, compared well with other professional occupations studied by Hackman and Oldham (1980), leading researchers to conclude that nursing is a highly enriched job. A more detailed analysis of the five core characteristics, however, revealed a different picture; nursing jobs were high in task significance and low in task identity when compared to other professional jobs. Further, differences existed in the MPS for nurses from different clinical areas. Coronary care nurses scored high in MPS while nurses in psychiatry and medical-surgical areas scored low. Medical-surgical nurses reported the lowest scores for autonomy and task identity of the six areas measured. Since more nurses work in medical-surgical areas than in any other hospital area, there is cause for concern (Joiner et al., 1982).

A study by Seybolt (1986) examined the turnover intentions of present employees and the predictors of those intentions, utilizing the impact of the job and its characteristics on the individual. The author used two sections of Hackman and Oldham's Job Diagnostic Survey (JDS) that computed aspects of job satisfaction and the motivating potential score (MPS). Seybolt found that relationships varied between turnover intention and job satisfaction at different career stages. The aspects of the JDS which were tested in

this study appeared to provide useful correlations with career stage and turnover intentions, and the relevance of the work design model to nursing warranted further detailed investigation.

Roedel and Nystrom (1988) found positive relationships between job satisfaction facets and the three job characteristics of task identity, autonomy, and feedback in a study of one hundred and thirty-five nurses in a community hospital.

Holaday and Bullard (1991) surveyed pediatric staff nurses' reactions to their jobs and compared the scores on the JDS to professional/technical norms. The means of the following variables were significantly lower ( $p < 0.05$ ) for the nurses than employees in other jobs: task identity, autonomy, experienced responsibility, general satisfaction, and pay satisfaction. Nurses expressed a desire to have a job that provided growth enhancing conditions. However, when given a choice, the nurses selected job situations that did not enhance growth, leading one to query whether the nurses perceived that there was sufficient support for autonomy available to them. There were some interactions between the characteristics of individuals and jobs which affected the impact of various jobs on the affective and behavioural response of employees.

A correlational study which tested a model of the relationships between head nurse role characteristics and unit outcomes, using the JDS, found that there were significant relationships between both role characteristics and job satisfaction, and outcomes (Tumulty, 1992).

Landeweerd and Boumans (1994) studied the effect of work dimensions and the need for autonomy on nurses' work satisfaction and health, using the JCM as a starting

point for the study. The job characteristics of feedback, autonomy, and clarity were positively related to the outcome measures. The authors included the type of nursing care system used in the nursing unit as an organizational factor thought to have an important effect (Duxbury et al., 1984). The researchers found that task oriented nursing care systems correlated negatively with job satisfaction.

A Finnish study compared primary nursing, viewed as a highly enriched job, with functional nursing, viewed as a job with low enrichment, using the JDS (Kivimäki, Koskinen, and Voutilainen, 1994). Nurses in primary nursing reported higher work motivation than personnel occupying jobs with a low level of enrichment. Studies such as this one mistakenly presume that there is a standard, shared definition of nursing care models. Unfortunately, there are no standardized comprehensive definitions at present. Prior to the development of such definitions, it will be necessary to investigate the specific attributes or component parts of the models that are associated with work motivation.

It is appropriate that most of the studies on job satisfaction were carried out in hospital settings where more than 80% of all nurses are employed. Only the Joiner study focused on the specific clinical unit of work and sought to relate job satisfaction to work environment even though there are known differences between units. Only two of the studies looked at the characteristics of the nursing practice model; both the paper by Landeweerd and Boumans and the Finnish paper examined whether work was task or patient focused. While not all of the factors which impact on job satisfaction relate to characteristics of the work environment or job design, it is significant that a large number



of them do. An exploration of these factors may lead to opportunities for change. A more thorough look at the components of practice models may add to the necessary knowledge base needed to differentiate clearly and comprehensively between nursing practice models and the characteristics of work that contribute to work motivation.

### Criticisms of the Model

According to Algera (1990), the JCM has been most criticized for its lack of objectivity in determining the characteristics of the job. That is, both the observations of the task characteristics and of the behaviour and attitudes of the worker derive from the same source, the worker himself. This issue of objectivity may prove yet to be a point in favour of the JCM since research by Fried and Ferris (1987) indicated that objective and perceived task characteristics are related. Task characteristics are viewed in a somewhat similar manner by both those who hold a job and others, such as researchers, supervisors and peers in different positions. As in other situations, and as pointed out by Algera, it is not easy to find objective indicators to serve as valid measures. Or, taken another way, subjective determinants of situations are increasingly being recognized as being valid. Indeed, knowledge workers are considered to be the experts on the characteristics of their jobs.

The research on motivational approaches to job design has been frequently criticized for common method bias. Campion (1988) used three methods to address method bias. He concluded that within-subject method bias may not be as great a concern as had been previously believed. Lowery and Krilowicz (1994) also found evidence of an association between the measures of objective or results-oriented measures of

performance and subjective supervisory ratings of performance. However, they also noted that objective performance accounted for only 23% of the variation in supervisory ratings, which indicated that supervisors were basing their evaluations only partially upon employees' performance, and that factors other than actual performance had a larger influence on the evaluations.

Spector, Jex, and Chen (1995) found correlations between incumbent and objective ratings of jobs significant from 0.14 to 0.28. They concluded that objective ratings may at most reflect what a job is in general, and subjective ratings may reflect the dynamic aspects of the job. Thus the methods used in the JDS appear to be sufficiently valid and reliable to capture the estimates of employees' performance.

The variable, Growth Need Strength (GNS) is considered to be a moderator between job characteristics and outcomes in the model, but other moderators including individual difference variables such as age and experience on the job have not been well considered. Medcof and Wall (1990) reported that there have been relatively few studies that supported Hackman and Oldham's (1980) proposition that GNS moderates the relationship between the motivating potential score (MPS) of jobs and the work outcomes of growth satisfaction, internal motivation, and productivity. Graen et al. (1986) suggested that the GNS has not been found to act as a moderator between the MPS and work outcomes because MPS is not a good measure of the growth opportunity offered in a job. Graen et al. suggested that the concept of growth opportunity could be added to that of MPS because employees with high GNS responded positively to a growth opportunity while those with low GNS did not.

Medcof and Wall (1990) reaffirmed, however, that this new modification is only an incremental alteration to a specific part of the JCM, and that care must be taken not to undervalue the JCM. Other researchers have found that subjects who scored high on growth need strength (GNS) had a stronger relationship with the motivating potential score (MPS) than subjects who scored lower on the GNS (Loher et al., 1985). It appears that the construct of Growth Need Strength can continue to be used, albeit cautiously, bearing in mind its potential weakness.

Landeweerd and Boumans (1994) found that workers with relatively little preference for autonomy seem to react more negatively to the presence of positive job characteristics than workers with a relatively high preference for autonomy. This finding provided added credibility for the JCM as it stressed the importance of considering both the worker as an individual and the nature of the job, and may be taken as a measure of validity of the model.

Stress and the role of individual differences have been cited as omissions in the model (Norbeck, 1985). However, Campion (1988) found that neither individual differences in terms of preferences/tolerances for types of work nor demographics moderated job design-outcome relationships. Packard and Motowidlo (1987) examined the relationship between subjective stress, job satisfaction and job performance in hospital nurses. They reported that subjective stress seems to result from two main sources: characteristics of the work place and characteristics of the worker. Variations among clinical areas within hospitals may be associated with events that are more or less stressful.

In summary, the criticisms of the model seem to reflect the fact that it is not without problems, and that there is a felt need for such a frequently used model to be flawless. However, the ambiguity which may result from definitions of the concepts appear in no way to minimize the overall soundness and theoretical underpinnings of the model. Caution is required in interpreting the data from any model, in any area, and careful critical consideration of the findings is an essential part of all research.

### Implications

The JCM has been used most frequently, as it is intended, to make a diagnosis rather than to implement specific changes. That is, the nature of the actions to be taken once a diagnosis about the design of the job has been made is highly dependent on factors specific to the organizational and environmental context. This mandate is well within the thinking of both Hackman and Oldham and other organizational theorists who state that to engage in job redesign one must take a broad perspective of the organization as a whole and as one that is affected by environmental and social forces.

Hackman and Oldham cautioned against there being an easy way of improving jobs. Their point is well taken that regardless of what other changes are made to improve person-job relationships, unless the work itself is also basically satisfactory to the worker, success may be elusive.

If the results of study indicate that the motivational potential scores of jobs are low, then research from behavioural sciences including Hackman and Oldham (1980) suggest various approaches, including combining fractionalized tasks into larger modules, forming natural work units, increasing direct contact between the worker and the user of

the services or products, loading jobs vertically, and creating larger feedback channels.

Brass (1985) argued for including uncertainty concerning technological development as a constraint in the redesign of jobs. Clegg (1984) cautioned that knowledge technology, which is not unlike the knowledge worker concept, incorporated a varying degree of uncertainty which must be accepted by organizations and not feared by them. That is, power relationships and support structures must be prepared to adapt to the nature of the job change for the good of the organization.

It would appear that researchers using the JCM should collect data on the broad organizational perspective as well as on the nature of the job, the needs of the individual worker, and the technology in place, to meet the needs of job redesign in practice. Given that this can be included in the model's use and in the analysis of its findings, the JCM may be one of the few valid and reliable tools available.

In summary, the JCM fits well within the framework of change strategies. It takes into account the technologies and roles within the organization, although this aspect could be improved. It is based on a human resource model which aims to find the best fit between the individual and the job, and it includes the subjective meanings and values held by the worker. Finally, it is likely to lead increasingly to political changes in the broader context of the organization as workers in redesigned jobs come to demand more from their place of work.

The Job Characteristics Model is on occasion reported as being less used than previously, and because of its earlier popularity is frequently a topic of critical discussion (Schneider, 1985). However, it continues to be the most used theoretical construct in job

design (Fox and Feldman, 1985; Hart, 1990). It should continue to be a valuable benchmark for future work in job design.

### Section III: Nursing Care Delivery Systems

#### Variations Across Nursing Units

It is evident that work varies among different nursing units. In the past, the work of nursing has been generally treated as one occupation but as Medcof and Wall (1990) asserted, grouping all nurses together as if they did exactly the same work is artificial. Indeed, the nursing work on different hospital units varies considerably and is primarily a function of the medical condition/diagnosis of the patients and the type of nursing practice model. The results of the study by Medcof and Wall support the proposition that different work places within the nursing profession attract and satisfy workers with different needs, and that the nature of the work is a significant variable in the equation. The most routine work occurs in obstetrics and medicine and the most non-routine work in intensive care and surgery (Leatt and Schneck, 1981, 1984).

The high prevalence of internal transfers and turnover within the nursing profession attest to the differences within nursing units. Although it has been problematic to account for and systematically study the differences between units, it has become imperative that researchers attempt to understand what are the attributes of nursing units that attract or discourage nurses.

#### Research on Practice Models

It is hardly surprising that the research on practice models has shown mixed

results since it is difficult to operationalize and rigorously define the models. The most frequently researched model has been that of primary nursing. Studies by Marram, Barrett, and Bevis (1979), Ciske (1974), and Hartz et al. (1989) found that staff were well satisfied under primary nursing while Steckel, Barnfather, and Owens (1980) found no differences, and Giovanetti (1980) reported that staff satisfaction was greater for a control group.

Case management or managed care is generally regarded as an extension of the primary nursing concept and research has found that case management research has emphasized cost savings and reduced length of stays. Direct care time, however, can increase during the patient's stay. Nurse satisfaction has only been measured in anecdotal fashion (McCloskey et al., 1994). Anecdotally, nurses in one setting reported increased responsibility and accountability and the physicians in the study were satisfied with the input they had into the care plans. The resulting increased communication and interaction between the two groups may have been a significant factor in the outcomes (Guerette, 1995).

Nursing shared governance refers to shared authority and accountability for decision-making by nurses and the organization at the unit level and in a broader hospital context. While some studies have linked shared governance and nurses' satisfaction in an anecdotal way, a study by Kovner, Hendrickson, Knickman, and Finkler (1994) found that while some nurses welcomed the additional authority and autonomy that accompanies shared governance, many others did not. It is as difficult to evaluate shared governance as other models due to the variety of definitions and the complexity of the

shared governance model.

Lengacher et al. (1994) found that there were no research-based publications that have demonstrated a link between staff satisfaction and turnover/retention due to the effects of an empirically-designed nursing practice model. One explanation for this lack may be that we have not yet analysed the practice models in such a way as to permit them to be objectively studied. Neither have we specifically investigated nursing practice models for the components of the work environment that have been shown to be related to job satisfaction.

#### Background to the Framework

The framework shown in Chapter 1 and repeated below has been developed to allow an exploration and analysis of the components of practice models thought to impact on nurses' job satisfaction.

Kovner, Henrickson, et al. (1993) examined eighty-six pilot units and forty-two comparison units at thirty-seven hospitals. Four categories of nursing innovations, including reorganization of nursing activities, computer projects, case management, and shared governance were implemented and evaluated. The rationale for the reorganization was to use scarce nursing resources more effectively and to respond to nurses' reports that they were spending too much time performing activities that did not require the skills of a professional nurse.

Overall, the projects elevated the level of professionalism, improved the way nurses communicated in their practice, and enhanced accountability for those nurses who accepted the changes. However, negative effects were found across the four innovations.



Some nurses did not welcome the additional responsibility where they were required to delegate to nurses' assistants. Staff nurses had trouble with the greater accountability in case management. Shared governance led to feelings of skepticism about whether nurses' involvement in decision making was legitimate, and nurses felt that the decision making process was time consuming. Their complaints shared common themes relating to autonomy, communication, professionalism, task reorganization and goal preference.

Lengacher, Mabe, et al. (1993) introduced nurse extenders or assistants in their redesign of nursing practice and found that nurses needed more confidence and skill in role delegation and that not all nurses desired to work in partnership with others. Continuous information feedback was critical to the success of the redesigned nursing practice. Pincus (1986) reported that certain aspects of communication were also influential contributors to nurses' job satisfaction in a field study of over three hundred nurses.

Variations in practice models are determined by a multitude of factors, and some clearly have a greater impact on nurses' job satisfaction than others. Communication in its various forms appears as a thread running through many of the variables studied in the literature.

The final framework consists of the factors that have been derived from the research literature and include:

1. Individual preference factors for autonomy and task divisions,
2. Factors of satisfaction with communication and interaction relationships,
3. Support for autonomy as a professional status requirement that may impact on

the goals of the practice model and the individual,

4. Client demands which indicate the complexity and uncertainty in the nursing unit, and, to a lesser extent, the technology of the unit. This environmental dimension may affect the character of the above factors.

Figure 1 is reproduced from page 14 to summarize the framework in point form.

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Preference for Task Divisions  
Support for Autonomy  
Satisfaction with Communication  
Complexity of the Patient Population

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Figure 1. Framework for the Analysis of the Characteristics of Nursing Practice Models that Impact on Job Satisfaction (repeated from page 14)

Autonomy

Most practice models have attempted to increase the autonomy of nurses. Control and autonomy are two particular traits of a profession that clearly illustrate the "social contract of trust between society and the profession" (Beletz, 1990, p.17). Autonomy is a universal function of a profession. To Lyon (1983), it simply meant ownership of one's work. The extent to which nurses have achieved control or ownership over their practice is paramount in rating the success of a model of care delivery for nursing. The distinction between medical and nursing acts and decisions about practice is based on who bears primary responsibility and autonomy for the action that is required in response to the diagnosis that is made (Murchison and Nichols, 1970, p.270).

If nurses have the self-directed authority to treat phenomena, they have autonomous nursing practice and control over their decision making. However, responsibility for actions within hospital settings is also seen as a shared function. Lyon (1983) advocated combining the goals of the organization with those of the professions involved so that professional autonomy could be fostered and protected. While such an approach is an inherent part of today's collaborative practice models between physicians and nurses, it continues to make autonomy and control unclear. Given that there is often a confusion over and blurring of roles by both nurses and physicians, it is not surprising that several studies have reported that role clarity and expectations of nurses are frequently at odds with their role perceptions (Chaska, 1978; Singleton and Nail, 1984; Weis and Davis, 1985).

Autonomy and control over professional practice are only possible when role clarity, tolerance for ambiguity, support and shared expectations exist within a nursing care delivery system. Since every nursing care delivery system exists in tandem with the hospital's professional groups and the organization's culture and philosophy about goals and outcomes, at best nursing's role clarity and expectations can only be partially achieved within the hospital domain, but autonomy and its support are possible.

The dilemma does not lie only within the acceptance and agreement of general roles for staff nurses, but rather in the specifics by which the general roles are operationalized. To illustrate, as Chaska, Clark, Rogers, and Deets (1990) wrote, staff nurses are seen as the facilitator in the delivery of care, the link with the physician, and the provider of nursing care that complements the medical regimen. The interpretation of

the above general roles into specific activities gives rise to conflicting ideologies among nurses and other members of the health care team. The more clearly defined and accepted the roles within a model for nursing care delivery systems can be, the more there will be congruence between roles and expectations, and the more autonomy can be fostered.

Unfortunately, autonomy is not simply a matter of clearly defined roles with ownership. Nursing has also been unable to define and take ownership of the boundaries of its work for a different reason (Stelling, 1995). Non-nursing tasks are assigned to nurses because there is an expectation by the hospital community that nurses will always fill in the gaps. To the extent that nurses accept responsibility for carrying out the work of others over their own, they do not rate highly their own work of nursing. Nursing work of a relational and interactional nature with patients and their families, and planning for care are the first to be sacrificed. Until nurses value the work of nursing, and the environment adds resources to support nurses' activities, autonomy will not be able to be fully realized.

McCloskey (1990) found that perceived autonomy was not clearly related to workload. A study by New, Nite, and Callahan (1965) found that even the addition of excess staff did not allow the nurses to devote more time to autonomous nursing tasks. Therefore, a reluctance to take on autonomous work may be related to a fear of having neither the skills nor the support necessary to function in this way, or an acceptance of the goals of the organization which conflict with those of the profession.

A theme in the nursing literature on the work environment linked the extent to which nurses are adequately supported to be self-sufficient and to make their own decisions, and their level of job satisfaction (Guerette, 1995; Tumulty, Jerrigan, and

Kohut, 1994).

### Communication

There is often a parallel between the manner in which communication occurs between the nurse and the health care team, and a corresponding communication system of managerial control, although the two types of communication differ in form and process. The communication system, both formal and informal, that is required to provide effective patient care differs according to the practice model in use. With the acceptance of shared governance by departments of nursing, a bottom-up management process is beginning to appear in some hospital settings. This type of governance nurtures and supports the notion that shared social interactions and discussions belong to the staff nurse role. Who communicates with whom, in what context, and the formal or informal nature of that communication is clearly apparent and readily discerned by members of the unit, regardless of the type of practice model in use.

There exist wide differences in how decisions are made concerning organizational and professional issues. Staff nurses are beginning to be given an independent voice in decision making that extends beyond the bedside. The advent of the councils of nurses in Quebec should encourage the development of more decentralized decision making at the staff nurse level, and may give nurses the opportunity to reflect on the appropriateness of the fit between their goals and their particular care delivery system. Nurses will need training in how to communicate effectively within the larger forum of hospital administration where many of the participants have higher levels of education and more experience in presenting their ideas successfully .

The conflictual relationship between the formal and informal means of communication is still present today although improvements are clearly noticeable. Donner (1986) acknowledged that it is recognized that nurses should be involved in determining the structure of the organization in which they work at the unit level and additionally, at the level of management.

In another domain, researchers have generated data supporting positive relationships: firstly, between collaboration that includes types of communication and patient outcomes; and, secondly, between increasing staff satisfaction and the retention of nurses in intensive care units (Baggs, 1992; Knaus et al., 1986; Mitchell et al., 1989).

A meta-analysis of studies on participation in communication, satisfaction, and productivity was carried out by Miller and Monge in 1986. They found a moderately strong positive relationship between satisfaction and participation. It appeared that working in a participative climate was strongly related to satisfaction at work. Further, the authors found that a generally informal and participative climate that encouraged communication and decision making had a more substantial effect on worker's satisfaction than participation in specific decisions. Their findings suggest that organizations with formal systems of participation may differ greatly from organizations in which participation is an informal managerial norm (p.749). It would seem, therefore, that it is crucial to assess the nurses' perception of how participative the climate is for communication within the practice model. Practice models vary in the extent to which they encourage participative communication styles.

The link between communication and motivation has not been explored in the

nursing literature although the relationship is theoretically plausible and fits within the Job Characteristics Model. The essence of feedback rests on the type and amount of communication that the worker receives.

### Task Divisions/Requirements

At least two natural divisions exist within each of the practice models found in nursing. These divisions illuminate the differences between the models and may help analyse how particular models contribute to job motivation. The first division involves person-centred versus task-centred nursing care, and the second involves non-professional tasks versus professional tasks. These task divisions may further be considered as involving direct or non-direct care to the patient. The way these tasks are divided speaks to the issues discussed in this section; preferences for autonomy, beliefs about professionalism, the degree of participative management and shared communication that exists within the nursing unit and in the organization, and the degree to which goals are similar for nursing and the organization.

Little research was found that attempted to differentiate between tasks or to relate them to job motivation in spite of the clear link between how tasks are divided and the nature of the work of nursing. Nurses have definite preferences for specific types of tasks.

A study by Lengacher et al. (1994) found that nurses on an experimental nursing unit which used nurse extenders in an otherwise total patient care practice model had higher satisfaction with task requirements, but the control unit which was similar except for the absence of nurse extenders had higher satisfaction with autonomy. Generally,

nurse extenders are workers trained on the job to carry out standard tasks such as bed-making. The nurses on the experimental unit were satisfied with not doing non-direct care but felt they had reduced their autonomy in giving away non-direct care activities.

The implications of these findings are important for nursing. The change in autonomy could be related to the shift from a total patient care model, in which the nurse made all the decisions and did non-direct care activities, to the experimental model where the nurse delegated activities. Schwartz (1990) suggested that nurses may prefer an environment where boundaries for decision making are clearly defined. The manner in which nurses view nursing and non-nursing tasks seems to be dependent on their perception of and preference for autonomy. Nurses may prefer an environment where support for autonomy is both subjectively and objectively perceived. Landerweerd and Boumans (1994) reported that nurses with a high preference for autonomy had less job satisfaction when a traditional task oriented nursing care system was practised. There is an interrelationship between task divisions, autonomy, and satisfaction.

#### Environmental Uncertainty

Patients are generally grouped on nursing units according to their medical or surgical condition or the severity of their condition. Allred et al. (1994) found that the notion of environmental uncertainty was helpful in explaining conditions in the nursing practice environment that affect the delivery of care and nurses' motivation and satisfaction. Environmental uncertainty is an organizational concept that refers to times when unanticipated events and problems occur with frequency, and due to a lack of critical information and/or resources, cannot be predicted by organizational members



(Miliken, 1987). An adequate description of the nursing practice environment may be useful because a fuller understanding of the conditions under which care must be provided may help to illuminate who should be responsible for what work and how that work is to be coordinated among the various professional and technical personnel (Allred et al., 1994).

Research studies (Lucas, Atwood, and Hagman, 1993; Norbeck, 1985) have found differences in job satisfaction according to different types of patient care units which vary in their level of environmental uncertainty and, according to the JCM, differences in motivation should also be evident..

### Conclusion

In summary, several issues have been discussed that impact on the analysis of practice models. and consequently, on any attempt to redesign or design models that will meet nurses' needs for job satisfaction through an increase in motivation.

Autonomy has been clearly linked to relevant goals and the communication system in place in hospital settings. There is, however, a fear of autonomy that emerges when nurses fail to perceive enough supports available to sustain it. Supports are required both internally through skill in communicating, delegating, and a strong belief in professional practice, as well as concrete support in the practical environmental context. A global perceived sense of a general participative environment for communication, rather than specific decision making permission, appears to be necessary to foster autonomy and job motivation, and it too is amenable to measure.

The value placed on nursing work will transcend any practice model although it

will be influenced by the model in place. The division of tasks into professional and non-professional categories and the nurses' preference for the nature of the division will reflect the goals (and professionalism) of the individual.

Finally, changing the work environment through the analysis of practice models may challenge the world of nursing but it may be the next requisite step. A skilful blend of autonomy with support and a sense of participative communication may prove to be a good starting point.

#### Section IV: Job Satisfaction in Nursing

##### Introduction

The purpose of this section is to provide an overview and a critical review of the nursing and health care literature on job satisfaction for nurses, particularly by illustrating the major directions used in the research, and then by pointing out significant deficiencies in the nature of that research, including the absence of a focus on motivation. An alternative approach and new directions for research are suggested that may strengthen the links between job characteristics, job motivation, satisfaction, and patient care outcomes. Job satisfaction is clearly related to worker motivation (Kosmoski and Calkin, 1986; Price and Mueller, 1986). Humans are motivated by a complex set of interrelated factors in that particular needs themselves become motivational when the work setting permits them to be satisfied.

The extent to which people are satisfied with their jobs is significant for several reasons. Work productivity and economic gains are closely affected by the extent to which workers are motivated and satisfied by their jobs. Forty years ago, people doing

knowledge work and service work formed still less than one-third of the work force. Today, such people account for three-quarters if not four-fifths of the work force in all developed countries. Their productivity, rather than the productivity of the people who make and move things, is the productivity of a developed economy. It is abysmally low (Drucker, 1993, p. 83).

Drucker commenting on some of the reasons for this situation pointed squarely to the characteristics of the work, "The task of nurses in hospitals is patient care. But every study shows that they spend up to three-quarters of their time on work that does not contribute to patient care. ...This not only destroys productivity; it also destroys motivation and pride." (p.84).

He emphasized that in knowledge and service work, partnership with the responsible worker is the only way to improve productivity, and that those who actually do a job know more about it than anybody else. They may not know how to interpret their knowledge, but they do know what works and what doesn't.

Motivation and satisfaction have been used interchangeably in the nursing literature even though they represent different concepts and occur at separate phases in models of work outcomes. Briefly, job satisfaction refers to a collection of attitudes that workers have about their jobs, while motivation is characterized by the extent that a worker applies effort, persistence, and direction to work that ultimately leads to job satisfaction.

Thus, the factors that have been found to serve as motivators of work behaviour such as autonomy, recognition, and feedback may also be sources of job satisfaction. It

appears that these factors among others are referred to as job satisfiers in an effort to search for solutions to the myriad problems caused by job dissatisfaction; in reality, no such short cut to understanding and problem solving exists. Understanding work behaviours requires an examination of related processes at the individual, group, and organizational level which in turn requires that we apply conceptual frameworks and theory to our research. Understanding behaviour in the work place is dependent on knowing what factors and interactions influence desirable work behaviours and how they do so (Kanungo and Mendnca, 1994). Simply looking at job satisfaction is not sufficient.

To focus only on job satisfiers means that we are denied an understanding of employees' needs and values, motivation, work behaviour and personal and work outcomes. Furthermore, we cannot modify the job satisfiers without knowing how they are affected by the above conditions and their theoretical underpinnings. These issues are alluded to but seldom addressed in the nursing literature. For example, Kovner, Hendrickson, Knickman, and Finkler (1994) stated that job satisfaction can be conceptualized from a variety of theoretical approaches, but failed to use one in their study although they used a questionnaire based on need fulfilment theory. The authors concluded that changing the work environment seemed to bring about significant changes in elements of satisfaction but did not link their findings to a conceptual model. Neidlinger et al. (1992) wrote that values, needs, resources, knowledge, technology, politics, and expertise all enter into achieving successful innovations in nursing, but did not use a motivation theory to guide their research.

There are several reasons that may serve to explain why job satisfaction has been

the focus of study in nursing rather than motivation:

1. Job satisfaction is related to the high costs of turnover and nurse productivity in a pragmatic sense.
2. The health care environment is perceived as stressful and uncertain resulting in a compromised quality of work life.
3. There is a definite gap between nurses' expectations for a career in nursing and its actual satisfactions. Paradoxically, nurses continue to be motivated by altruism although they are dissatisfied with their work conditions (Seymour and Buscherof, 1991).
4. It appears to be easier for nurses to describe the factors that satisfy them rather than those that motivate them. Descriptive reports have been the norm for much of the nursing research in this area in the past.

The following is a review and critique of the literature in two areas: nurses' job satisfaction studies, and quality of working life studies carried out in Canada.

#### Nurses' Job Satisfaction Studies

When job success in nursing has been explored it generally has meant applying the extrinsic reward criteria traditionally used in male dominated professions (Zimmerman and Yearwood, 1986). However, in marked contrast, Dexter (1985) observed that regardless of the type of work or organization, women's employment is characterized by limited power over their work activities, few economic or symbolic rewards, and low prestige. Since few economic or symbolic rewards are available to women in professions, Buscherof and Seymour (1990) have argued that one important consequence of experiencing the barriers to extrinsic forms of success has been for

women to find success in ways that stress personal satisfactions rather than external rewards. A national American survey which polled factors that contribute differentially to both self-perceived and externally measured success in nursing found that the most valued forms of success are intrinsic (Rosenfeld, 1989).

Irvine and Evans (1992) carried out a review and meta-analysis which included examining the correlates of dimensions of job satisfaction. They found that there are moderate to high correlations between job satisfaction and autonomy, and between job satisfaction and supervisory relations. They also found support for the correlates of age, job tenure, head nurse leadership, work overload, role conflict, and feedback. The questions they raised about the role of primary nursing could not be answered through the meta-analysis as only a few studies provided correlational data on this relationship. Of the above correlates, only three, job tenure, age, and stress are individual variables. The others are related to the work and job environment.

Irvine and Evans stressed that there is a need for concept clarification, especially of concepts such as job satisfaction. They cautioned that the meta-analysis provided only modest directions for future research, and that investigators may want to incorporate some of the new trends developing in the general job satisfaction literature, such as a more thorough look at the characteristics of work.

Job satisfaction has been examined in two types of studies: panel studies with prospective or longitudinal designs and cross-sectional studies. Panel studies permit a comparison of factors that affect job satisfaction and subsequent turnover. They allow predictions to be made concerning the effects of dissatisfaction and satisfaction. Cross-

sectional studies provide information from one point in time. Cause and effect relationships cannot be inferred from this type of study (Frisina, Murray, and Aird, 1988). They do, however, offer a view of an existing situation and facilitate higher level studies.

Weisman and Nathanson (1985) studied predictors of individual job satisfaction, turnover, and performance in 1,200 nurses over a twelve-month period in a panel study. They found that nurses' perceptions of both organizational and non-organizational job factors were the most important predictors of job satisfaction. Factors leading to an overall perception of decreased autonomy were the most frequently stated reason for dissatisfaction and leaving their jobs.

Blegen and Mueller (1987) tested job satisfaction as a unidimensional concept in an eight month panel study of three hundred and seventy nurses and found the variables that were the chief determinants of job satisfaction were routinization, promotions, distributive justice, age, day shift, workload, kinship, and outside opportunity.

The National League For Nursing and the Division of Nursing, the Department of Health and Human Services published a large-scale survey of newly licensed nurses in the United States (Rosenfeld, 1989). A national response rate of 71% (38,227 respondents) revealed that 36% of the newly licensed nurses employed in hospitals were dissatisfied with their jobs. While the primary source of dissatisfaction was inadequate salary, poor working conditions were cited by almost 18%. When actual salaries were examined, however, it was seen that those nurses who claim job dissatisfaction earn almost the same as their satisfied counterparts. No other topic in the survey received as much attention from respondents as job satisfaction (Rosenfeld, 1989). There was agreement in the top

five ranked reasons for job dissatisfaction from twenty-three nurse job satisfaction surveys reviewed by the Health Care Advisory Board (1990); the reasons included characteristics of the job or work place: undesirable hours, inadequate staffing, inadequate compensation, inadequate promotional opportunities, and inadequate recognition or sense of achievement.

Everly and Falcione (reported in Stamps and Piedmont, 1986, p.9) used a Likert scale to indicate the degree of importance for items that represented aspects of the working environment. A sample of one hundred and forty-four staff nurses at four hospitals responded. Factor analysis determined the underlying dimensions of perceived job dissatisfaction. Four factors accounted for 60% of the variance:

1. Interpersonal and social relationships with co-workers,
2. Rewards of the work itself,
3. Opportunity for advancement and pay or professional status,
4. Administrative policies supporting autonomy.

Relationships with co-workers and supervisors provided the greatest amount of work satisfaction while hospital policies provided the least.

A large study carried out by the College of Nursing, University of Arizona and involving fifteen agencies (Hinshaw, Atwood, Gerber, and Erickson, 1985) examined organizational and professional job satisfaction. Organizational job satisfaction was predicted mostly by job stress, group cohesion, and the staff's control over their own practice. Professional job satisfaction for staff was predicted primarily by job stress, group cohesion, and autonomy in the position but not by the ability to control their



practice.

There has been increasing interest in the relationship between length of employment and job satisfaction. A study by Mottaz (1988) suggested that both job satisfaction and intrinsic rewards increased significantly with length of time in the organization while a study by McCloskey and McCain (1987) found that a decline in satisfaction, commitment, and professionalism during first six months of employment suggested that adjustment to the organization was more salient than role transition, and that professional values may depend on an organization's willingness to reward professional behaviour.

#### Summary of the Job Satisfaction Literature

Although there have been many studies on job satisfaction in nursing that have been carried out over the past years, most of the studies have focused on the major sources of work dissatisfaction. A theoretical framework surrounding job satisfaction and motivation was lacking in the majority of the nursing articles reviewed (McCloskey, 1990; McCloskey and McCain, 1987; Prescott, 1986; Weisman, Alexander, and Chase, 1980). Long lists of variables affecting job satisfaction emerged from almost every study, but the lack of a consistent theoretical framework prevented further understanding and measurement of important factors. Because many of the instruments designed for studies to measure job satisfaction have been developed specifically for the purposes of an individual study, it becomes difficult to summarize findings clearly and to reach a generalization that might lead to an understanding of methods of increasing work satisfaction.

There appear to be three conceptual orientations used in the general area of job satisfaction - need fulfilment and goal theories, social reference or expectancy theories, and Herzberg, Mausner, and Snyderman's (1959) motivational and hygiene factor theory. Both the equity and needs theories are well accepted in the literature on motivation. However, of those nursing studies using a theory, most used Herzberg's two factor theory of motivation, even though it has been criticized as a method of understanding and explaining job satisfaction. A study by Ullrich (1978) also found that Herzberg's theory failed to account for much of the variance in explaining job satisfaction. Theories by Vroom (Larson, Lee, Brown, and Shore, 1984; Seybolt, Pavett, and Walker, 1978), Porter and Lawler (Seybolt et al., 1978 ), and Hackman and Oldham (Seybolt, 1986) have been used infrequently in the literature under discussion.

In general, the nursing literature has occasionally used theories of motivation as a diagnostic measure for satisfaction. The studies were more likely to combine motivation and satisfaction than to differentiate between them. The major criticisms of the research concern the lack of an underlying theory, the omission of motivation as an explanatory variable, and the failure to link job satisfaction to patient outcomes which comprise the bottom line for the health care industry.

#### Canadian Quality of Working Life Studies

The quality of work life studies carried out in Canada were not designed on the basis of a theoretical framework. In fact, even though they have been designated as quality of work life studies, they are more similar to job satisfaction surveys. They do, however, illustrate the genre of investigation that has been undertaken in the last twenty

years across Canada and, therefore, are included in this review. A study in Newfoundland (Advisory Committee on Nursing Workforce, 1988) found the following factors negatively affected job satisfaction and quality of work life: excessive work loads, lack of feedback, inadequate input into decision making, lack of time to exchange knowledge and skills, lack of support to participate in educational programs, lack of opportunities for advancement, inadequate pay for responsibility involved, inability to participate in scheduling of work hours, poor job communication with physicians and other health professionals, lack of sensitivity to social and kinship roles, and lack of child care.

In an Alberta study (Alberta Hospital Association, 1980), a factor analysis of 1,100 nurses' responses to factors which were related to job satisfaction identified ten topics. These were: advancement opportunities, opportunities for decision making and communication, educational opportunities, work overload, poor scheduling, lack of appropriate salary and benefits, insufficient recognition and feedback, lack of responsibility, autonomy, and insufficient challenge. A British Columbia study (Carson, McGuire, and Lamb, 1987) involving 1,885 nurses found findings similar to the previous two studies.

All of these studies, from Newfoundland to British Columbia, have concluded that job satisfaction and its determinants were the single most influential issues to impact on nurse retention. However, there remain difficulties in implementing suggested strategies which have followed from these studies, in part because the links between practice models, job satisfaction, motivation, performance, and turnover have not been clearly delineated, and patient outcomes were not addressed.

### A New Direction for Research

Although there have been a variety of approaches used to study job satisfaction in nursing, the outcomes of the studies do not appear to have resulted in major improvements or directions for change. The major outcome that is intended is improved patient care. Job satisfaction is related to turnover which is related to patient care outcomes when nurses are unavailable or dissatisfied. Thus, a new direction for research in the area is warranted. Focusing on the outcomes of motivation in nursing is a logical direction to follow.

One of the major difficulties to overcome in testing the relationship between job motivation for nurses and client outcomes is the issue of time. Which came first? The job motivation or the patient outcome? Another challenge concerns the multitude of variables that impact on client outcomes and our inability to control the majority of them. We can only rarely randomly assign patients to the intervention in question, and less often control their antecedent behaviours or conditions.

A review of the literature by Goodell and Coeling (1994) found no studies that specifically evaluated quality of nursing care as a consequence of nurses' job satisfaction. The authors suggested that an assumed relationship between job satisfaction and performance may have prevented research that focused on satisfaction and quality of care. However, the general literature in the area of job satisfaction and productivity has failed to find consistent evidence of such a relationship, reasoning that the workers' goals are frequently at odds with those of the organization's so that job satisfaction may not always translate into work outcomes for the organization (Ford, 1992).

In spite of the scope of the task, we can look at the hypothesized direction and nature of the relationship. The Job Characteristics Model of Work Motivation (JCM), provides a well tested theory of motivation, performance and satisfaction (Hackman and Oldham, 1976). The model specifies the conditions under which individuals will become internally motivated to perform effectively in their jobs. The model focuses on the interactions among three classes of variables:

1. The psychological states of employees that must be present for internally work motivated work behaviour to develop,
2. The characteristics of jobs that create these psychological states,
3. The attributes of people that determine how positively a person will respond to a complex and challenging job (Hackman and Oldham, p.250).

Thus, the characteristics of the job, specifically, skill variety, task identity, task significance, autonomy, and feedback can influence worker motivation, job satisfaction, work effectiveness and low job turnover.

A particularly interesting and timely observation arises when the theory behind the Model of Job Characteristics is applied to studies of patient outcomes that are at first glance unrelated to job satisfaction. The landmark study of the evaluation of patient outcomes from intensive units (ICUs) in major medical centres found significantly better results in patient mortality in some centres than in others. These differences were related more to the interaction and coordination of each hospital's intensive care staff than to the unit's administrative structure, amount of treatment used or the hospital's teaching status (Knaus et al., 1986). The authors concluded that the interaction and communication

among a hospital's intensive care staff directly influenced patient outcomes.

Staff interaction and communication may be similar to the concepts in the JCM of feedback and task significance. If so, a positive relationship may exist between job motivation and patient outcomes if the JCM can discriminate between nursing settings. This line of inquiry could be profitably extended to a variety of performance outcomes.

Other studies examined to observe whether the factors found to be directly related to positive patient outcomes were similar to the components of the JCM of work motivation revealed similar findings. A meta-analysis compared patient outcomes from research-based nursing care with those resulting from routine, procedural care. The patients who received the research based care had better outcomes than those who received routine care (Heater, Becker, and Olsen, 1988).

Another well known and highly regarded study found that very low birth weight babies could be safely cared for at home eleven days earlier than usual with the care of a nurse-specialist (Brooten et al., 1986). The nurse-specialists working with the mothers and babies received much feedback and enjoyed a high degree of autonomy for their innovative work.

And finally, initial research and evaluation data reflect the impact of a redesigned patient care delivery model on patient and staff outcomes. The overall length of stay for managed care patients decreased by one to four days, and turnover among nurses decreased from 33% to 19% (Robinson, 1995).

There appears to be a similar theme running through these studies. The development and implementation of research-based practice involves nurses, adds to the

significance of the task at hand, provides direct feedback, allows for increased skill variety and task identity, and supports increased communication and collaborative relationships. The creation of a research environment involves nurses and provides the joy of discovery in every day practice (Registered Nurses Association of British Columbia, 1991). All these factors contribute to a work environment that according to Hackman and Oldham (1980) can lead to positive psychological states in the worker and hence, to high internal work motivation, high work performance, high satisfaction with work, and low turnover.

It appears that the temporal model for such outcomes begins with the introduction of a research project involving patient care into the work setting. This event necessitates a redesign of the characteristics of the job for nurses so that the research project can take place. The redesigned workplace with its new dimensions favours feedback about the nature of the research, a sense of autonomy and collaboration with the researchers and the unit staff, an enlarged sense of task significance and task identity and perhaps a new mix of skills to be used. The resulting changes in the psychological states of the worker can lead to successful personal and work outcomes.

The possibility of a highly significant and profound relationship between the characteristics of the job, nurses' motivation, and client outcomes is clearly evident. Patient care outcomes are particularly difficult to analyse according to cause because of the myriad number of variables involved. It would seem that the presence of a guiding theory would be critical to create order and give direction to any such study.

A good example of this approach is reflected in a meta-analytic review of

participation, satisfaction, and productivity (Miller and Monge, 1986). The authors conceptualized participation using three models, each of which emphasized a different explanatory mechanism. The models tested cognitive, affective and contingency communication variables. They also included several methodological variables suggested by the models.

As a result of a careful and well-conceptualized study, the authors were able to report that working in a participative, communicative climate is strongly related to satisfaction at work; that participation had an effect on both satisfaction and productivity, and its effect on satisfaction was somewhat stronger than its effect on productivity (Miller and Monge, p.748). They were also able to make quite precise statements about the magnitude of the effect of participation on satisfaction and productivity. The authors reported that "organizational climate shows evidence of being more the cause of, than caused by, satisfaction" (Miller and Monge, p.746).

The past methods of enhancing nurses' job satisfaction have not attempted to influence patient care. This is surprising when one considers nursing's goal of providing quality patient care. A reasonable suggestion for further research is to consider using the JCM, which is the most used model of work motivation, as a measure of the relationship between job dimensions and outcomes whenever a change in patient care occurs. In this way over time the nursing profession can build a thorough understanding of the relations involved, examine the issue of timing, and look at changes before and after the implementation of the intervention. Job motivation may be an important mediating variable between the characteristics of the job and client outcomes, and one that stands



clearly as an essential component of excellence in patient care. For the present, it is important to determine the relationship between the models of care delivery and the JCM to further increase understanding. The present study will lay the groundwork by examining the fit of the JCM to the characteristics of nursing care delivery systems.

In conclusion, quality of care and client outcomes are two of the most significant topics for research in health care. Job satisfaction may be strongly related to client outcomes through the characteristics of work, such as the nature of models of care delivery, in ways that are profound and far reaching. Further inquiry is likely to contribute significantly to our understanding of the exact nature of the relationship between them.

### Section V: Nursing Turnover

#### Introduction

A major reason for including turnover in any study of job satisfaction and work motivation in nursing is clearly the cost of recruiting and orienting per nurse. The retention of nursing personnel is less costly than recruiting, hiring and orienting new nurses. Nurses have more than three times the turnover rate of the rate of teachers and one-and-a-half times that of social workers (Price and Mueller, 1981). Even internal transfers from one work setting to another within the same organization are costly to the health care system. Productivity which is affected by affiliation and competence is lessened with the orientation period, and costs increase until productivity is subsequently increased.

A difficulty in examining the issue of nurse turnover and motivation is due to the lack of a commonly accepted definition of measurement of turnover and the reasons

previously given for the lack of motivation theory found in the nursing literature. In the nursing literature, the turnover model developed by Price and Mueller (1981) and based on work by Mobley, Griffeth, Hand, and Meglino (1979) has been well received. The model suggests that commitment and intent to leave are conceptually distinct. Their results affirm that intent to leave correlates positively with turnover, and job satisfaction exerts a negative effect as it moderates the intent to leave variable. In this study, Mobley et al.'s definition is somewhat modified to focus on the notion of voluntary turnover by the addition of the word voluntary, as follows; the voluntary cessation of membership in an organization by an individual who received monetary compensation from the organization.

All models describe turnover as a process occurring over time and as having multiple determinants (Jolma, 1990). At the present time there is not a model of preference for nursing studies although the behavioural intention (intent to leave) appears as an important intervening variable through which job satisfaction in particular operates. There is, however, a theoretical concept which overlaps different models: job satisfaction is positively associated with every variable, such as autonomy, work stress, commitment, professionalism and communication that has been found in studies on turnover in nursing (Irvine and Evans, 1992). In the meta-analysis carried out by the above authors, they confirmed the theoretical link between job satisfaction and intent to leave, and in turn, the link between job satisfaction, intent to leave and turnover. The model continues to under-specify the factors related to nursing turnover in that only a small proportion of the variance in turnover is accounted for but continued examination of this approach is

warranted since the results show a clear and consistent relationship between job satisfaction, intent to leave and turnover.

### Research on Turnover in Nursing

Porter and Lawler (1968) noted the relationship between low work satisfaction and turnover, as have others in the field of nursing research. Price and Mueller (1981) in a fourteen-month panel study of satisfaction and turnover in 1,101 nurses (a response rate of 80%) found that seven variables including opportunity, participation, instrumental communication, integration, pay, distributive justice, promotional opportunity, and kinship responsibility influenced job satisfaction, and three other variables (routinization, professionalism, and generalized training) impacted directly on intent to stay. The important conclusion of this study was that job dissatisfaction has an indirect effect on turnover, through its direct effect on formation of intent to leave (Frisina, Murray, et al., 1988). A moderately strong connection between job turnover rates and job satisfaction has continued to be demonstrated in the literature (Steele and Ovalle, 1984).

In 1988 a task force on nursing manpower, retention, and turnover in the hospitals of the Montreal Joint Hospital Institute (MJHI) commissioned a report on the status of the nursing shortage. In Montreal, a survey of 1,587 hospital staff nurses was carried out by Collinge (1988) to identify factors that influenced turnover. She found that job satisfaction as measured and defined by opportunity for promotion, head nurse support, commitment to the organization, stress, recognition, involvement in decision making, professional development, co-workers support, and support from hospital administration influenced turnover.

At the end of September, 1987 the total turnover rate for staff nurses in the Montreal area was 44.0% (28.5% external resignations and 15.5% internal transfers). The report prepared by Collinge (1988) found that over 55% of the 1,587 respondents in the study indicated that they were almost definitely, or quite possibly, going to resign from their staff nurse position in MJHI hospitals within the next year.

In an effort to understand the reason for nurse turnover in one MJHI hospital, Edgar (1990) conducted a mailed survey of two hundred nurses who resigned from the hospital over a one year period. The content areas for the questionnaire were identified from previous surveys conducted by Collinge (1988) and from the literature on variables found to impact on turnover. The major factors influencing the decision to leave the employ of the hospital were the following factors which are related to motivation: the morale on the work unit, the opportunities for advancement, satisfaction with work load and support staff, feedback received from nursing and hospital administration, a need for personal growth, salary and the image of nursing. These factors are related to motivation and fit the JCM.

^^ The results of a study by McCloskey (1990) indicated that psychological rewards were rated one and a half times as important as safety factors and twice as important as social factors in retaining nurses. Extrinsic rewards attracted people to a job but intrinsic rewards were important in determining the turnover decision. This move to consider turnover as a matter of individual choice behaviour that is related both to personality and to organizational factors allows more predictive models to be used to study the problems of satisfaction and turnover. Such a framework has led to the notion that about one-half of

turnover may be controllable by the organization. Job satisfaction and turnover may be highly related to each other, but need to be theoretically and practically linked within the work of nursing.

The Canadian Nurses Association, in their report published in 1990, stated that in the past nursing administrators had failed to concentrate on the retention of well qualified and experienced nurses. The project examined twenty-three Canadian nursing labour force studies all of which concurred that poor working conditions acted as a catalyst to drive nurses out of nursing. For example, a Toronto study (Murray and Smith, 1988) involving 360 nurses found that work environment issues such as poor working conditions, poor hours, and lack of respect, were responsible for resignations.

Although turnover rates are affected by regional differences and job vacancy rates, they must nonetheless be determined by other forces as the following data suggest. From a Canadian perspective, turnover and vacancy rate vary both between and within geographical location. For example, in Newfoundland, in 1988, the vacancy rate was 3.4%; however, the turnover rate in St. Anthony, Newfoundland, was 45%. In Toronto, in 1988, the shortage of nurses was double the provincial rate, 7% compared to 3.4%.

Prestholdt, Lane, and Matthews (1988) found that 14% of the nurse respondents in their research had resigned during the six month study period. They found that the following factors together were able to predict 85% of those who resigned: (a) intent to resign, (b) social pressures from spouse and/or family, and (c) commitment to the hospital. The authors concluded that since the decision to resign is a multifaceted, involved process, it requires a careful assessment of the many factors contributing to the

process.

Curry, Wakefield, Price, Mueller, and McCloskey (1986) tested a causal model of nurse turnover which included job satisfaction, organizational commitment and intent to leave the job as the intervening variables affecting job turnover. Data were collected from 2,192 nurses (response rate of 63%) twice over an eight month period. Intent to leave one's job had a strong direct effect on turnover, and job satisfaction had the greatest effect on intent to leave.

### Implications and Conclusions

It appears that nurses throughout their careers tend to remain committed to their choice of work but at the same time, they are dissatisfied with their conditions of work. In support of this point, The Health Care Advisory Board (1987) researched all aspects of nurse recruitment and retention. They included over six hundred articles, monographs, surveys and research reports, plus over one hundred and fifty interviews with experts in this area. Their findings include five basic, and reasonable conclusions about nurse behaviour, namely:

1. At any one time over 75% of nurses are active in nursing.
2. When nurses do leave the profession, the departures are temporary and short-lived. The average absence from the profession is six years.
3. In aggregate, nurses who resign from hospitals do so for reasons of convenience and lifestyle.
4. Pay and advancement explain only a minority of resignations.
5. Nurses generally change jobs for similar positions.

Weisman et al. (1980) found that nearly half of the resigning nurses left for another hospital nursing job. Although nurses are strongly attached to the nursing profession, they are not strongly attached to their employers (McCarty, 1989). Patterson and Goad (1987) found that 57% of the nurse respondents indicated that they would have remained in their prior positions if changes in benefits or management practices had been made.

That such changes are not only possible but also effective is evident by the following: In 1982, the American Academy of Nursing identified certain "magnet" hospitals that delivered quality nursing care and were successful in attracting and retaining nurses. A study by Kramer and Schmalenberg (1991) compared the experience of magnet and non magnet hospitals in their success in retaining and satisfying nurses. Magnet hospitals (chosen according to criteria developed by Peters and Waterman, 1982) had a 6% vacancy rate compared to the 8% national median and a 9% turnover rate compared to a 16% median national rate. Nurses at magnet hospitals were significantly more satisfied with organizational structure, professional practice, management style, quality of leadership, and professional development than were nurses from a group of non magnet hospitals.

In summary, turnover may have multiple determinants which are related to motivation, job satisfaction and an intent to leave. In the world of nursing, it has been shown that it is possible to correct these determinants and improve worker retention.

#### Summary of the Literature Review

The literature review of motivation, nursing practice models, job satisfaction,

turnover and the Job Characteristics Model has attempted to indicate the actual and probable links among them, to outline the background for the present study, and to suggest directions for future research. The rationale for exploring the work of nursing using the conceptual linking of the JCM and nursing practice models with turnover has been developed. The basic proposition and conceptual framework for the present study is that internal work motivation arises from the characteristics of jobs in conjunction with the needs of the worker. It was seen from the literature that jobs that have attributes of autonomy, feedback, and task identity, variety, and significance tend to create conditions for high work motivation, satisfaction, performance, and low labour turnover. In addition, theory states that people respond differently to the same jobs, so that the characteristics of workers as well as the jobs themselves need to be considered as work is designed.

From the perspective of the work of nursing there is not one way to deliver nursing care, or one practice model of nursing, but several. If jobs are designed differently according to different practice models, the characteristics that create the conditions for good outcomes may also differ. Or put another way, is it the practice model or the presence of job characteristics needed for job satisfaction that contribute to good outcomes? It is important, therefore, to determine which models or rather, which attributes of practice models are most likely to provide fulfilling jobs. An acid test for nursing delivery systems is whether the necessary job characteristics for worker motivation are present so that the desired outcomes can be achieved.

The literature on job satisfaction in nursing has not clearly differentiated between work motivation and satisfaction, thus contributing to a difficulty in understanding the



relationship between the characteristics of work and its outcomes. A relationship between dissatisfaction in nursing, behavioural intentions to leave the job, and actual turnover has been found. Although there is presently not a shortage of nurses, societal and environmental changes in health care have resulted in nurses remaining in their jobs when under other conditions they may have decided to leave. The impact of dissatisfied nurses cannot help but be felt.

The Job Characteristics Model (JCM), developed by Hackman and Oldham (1976, 1980), conceptualizes the psychological interaction between employees and their jobs. The relationships specified in the model are based on prior motivation and research by Maslow, Herzberg, and Turner and Lawrence, (Gorsuch, 1976). The JCM remains the most used model of job characteristics and job design and has been found on examination to have few shortcomings, most of which can be resolved with care and attention to the underlying theory.

## Chapter 3

### Methodology

#### Introduction

The purpose of the study was to describe the relationship between motivation, job satisfaction, the characteristics of nursing care delivery systems, and intent to leave within the work of nursing, and to consider the usefulness of the Job Characteristics Model of motivation to the work of nursing in three McGill University teaching hospitals in Montreal, Quebec, Canada.

The study questions were:

1. Are the characteristics of the work of nursing related to motivation and satisfaction as measured by the Job Diagnostic Survey of the Job Characteristics Model?
2. Is there a relationship between motivation and satisfaction in the work of nursing, and intent to leave?
3. Is there a relationship between the attributes of nursing care delivery systems and motivation?
4. Are there significant differences between the means obtained on the basis of dimensions of the JCM, the "Intent to Turnover Scale" and demographic variables?

Given that several models for delivering nursing care in hospitals are thought to exist, it is important to establish whether the job characteristics necessary for worker motivation are present in the attributes of the models and whether they are related to the worker's intent to leave. The presence or absence of these job characteristics is an acid test for nursing systems because the characteristics are not only related to motivation but

likely and importantly to patient outcomes as well.

Briefly, the Job Diagnostic Survey (JDS) measures Hackman and Oldham's (1975, 1976, 1980) elements of the model of work motivation. The theoretical approach of the model proposes that certain psychological states intervene between task design and worker outcomes. Hackman and Oldham predict that if specific core job characteristics are present, workers will experience a positive affective satisfaction response when they perform well. Each major class of variables (job characteristics, mediating psychological states, growth need strength, work motivation and satisfaction) influences the way a person responds to the dimensions of their job.

Nursing practice models possess overlapping structures but contain differentiating characteristics by which they can be analyzed for the presence of job characteristics related to worker motivation specific to the work of nursing. These characteristics were assessed in a companion questionnaire to the JDS.

Job satisfaction and turnover appear to be related. Since the current economic situation has reduced the degree to which turnover is possible, intent to leave which is a proxy for turnover was measured.

The chapter is organized into three sections. In Section I, the variables studied are identified and labeled, and empirical properties of the data collection instruments are discussed. Section II is devoted to a discussion of the research population, sample, and procedures to gather data. Section III describes the statistical treatment of the research data according to the research questions.

### Section I: Research Variables and Instruments

The variables considered in this study relating to the job characteristics model were derived from the relationships hypothesized by Hackman and Oldham.

The three psychological states (experienced meaningfulness of work, responsibility for the outcomes of the work, and the knowledge of results) are the causal core of the model. Self-generated motivation, high satisfaction with the work and low intent to leave should be at their highest when all three of the psychological states are present.

The job variables are the five characteristics of skill variety, task identity, task significance, autonomy and feedback. The first three factors lead to experienced meaningfulness of the job. They, in combination with autonomy and feedback, reflect the overall potential of a job to prompt high internal work motivation and high work satisfaction. Because a job can be high on some of the characteristics and low on others, Hackman and Oldham created a summary score to reflect the overall potential of the job to foster motivation. A job with a high motivating potential scale (MPS) must be high on at least one of the three factors that promote experienced meaningfulness, and high on both autonomy and feedback.

In addition, the growth need strength (GNS) of the worker is said to moderate the relationships between the predictor and the outcome variables. Growth need strength is affected by five growth enhancing conditions; pay, job security, challenging work, satisfying co-workers, and quality supervision. However, in light of criticisms of this component of the model, only the items in Figure 1 (pages 14 and 53) were included to

differentiate nurses' satisfaction with the practice model in use. Further, the GNS variable was not used as an intervening variable.

The outcome variables are overall job motivation, satisfaction, and intent to leave.

The data collection instrument consists of four parts:

1. The Job Diagnostic Survey (JDS). The instrument was developed by Hackman and Oldham (1975, 1976, 1980) to measure the variables in their job characteristics model of work motivation. It was designed for employees on any job, given that those employees have at least a Grade 8 education, remain anonymous, and that the results are analyzed based on work groups with five or more members. The survey as a whole was developed over a two-year period, during which it was administered to 1,500 people in over one hundred jobs in fifteen different organizations.

All JDS variables are averages of scores on several items, where 1 is low and 7 high. Scores on the items which describe the job characteristics, the psychological states, growth need strength and affective outcomes were averaged to obtain summary scores.

Properties of the instrument and specific scoring information (including descriptions of item format and content and reliability) are detailed in Hackman and Oldham (1980) and reliability and validity are satisfactory (Hackman and Oldham, 1975).

Taber and Taylor (1990) reviewed and evaluated the psychometric properties of the Job Diagnostic Survey. Their review showed that although the JDS has psychometric limitations, it is able to provide useful information about perceived job properties. They reviewed empirical research to evaluate the test-retest reliability, internal consistency, scale discrimination, factorial validity, convergent validity across raters and methods, and

methods bias.

The internal consistency of the five core JDS scales of skill variety, task identity, task significance, autonomy and feedback, ranged from low-to-moderate. A review by Aldag et al. (1979) rated the internal consistency of the JDS as acceptable. Since each JDS scale contains items in three different formats, common methods variance within scales is likely to be less of a problem than in scales using only a single item type. The JDS scale intercorrelations ranged from  $r = .298$  to  $.424$ , with a median of  $.330$ . The five core JDS scales showed moderately good discrimination from one other. Several experimental studies reported in Taber and Taylor (1990) found that changes in objective task properties caused significant changes in JDS scores.

The psychometric properties of the JDS have been delineated section by section. General Job Satisfaction is measured by five items. The internal consistency was 0.76, the mean was 4.65, and the standard deviation was 1.27 in a sample of 6,930 employees working on 876 jobs in 56 organizations. General job satisfaction was significantly associated with perceived job characteristics and specific satisfactions.

Specific satisfactions including pay, job security, social, supervisory, and growth satisfaction are tapped with fourteen items, while internal work motivation is measured by six items in the JDS. The scores were found to correlate with job characteristics of skill variety (0.37), task significance (0.51), autonomy (0.40), feedback from the job itself (0.38), general job satisfaction (0.46), and growth satisfaction (0.46).

The instrument was designed to be completed by subjects in one sitting in about twenty-five minutes. With an overall sample size of 6,930 (46% female) the Spearman-

Brown internal reliability was 0.69, and the overall mean and standard deviation were 5.50 and 0.69, respectively for growth satisfaction. Internal work motivation was positively correlated with seven measures of perceived job characteristics, from 0.16 for task identity to 0.34 for skill variety. The association with general job satisfaction was 0.43. Internal work motivation varied significantly and linearly with job-level, from a mean of 5.47 for non-managers to 6.07 for upper-level managers (Cook, Hepworth et al, 1981).

2. Measurement of Turnover. The concept of intent to leave was used to study the nursing turnover variable. Price and Mueller (1986) defined turnover intent as an individual's perception of likelihood of voluntary employment termination. The Intention to Turnover subscale of the Michigan Organizational Assessment Questionnaire was used to measure the concept in this study. The scale is a three item scale with responses scored on a 1 to 7 scale.

The co-efficient alpha is 0.83 (n = 400). Correlations of -0.58 and -0.27 were reported with the measures of overall job satisfaction and job involvement, respectively (Seashore, Lawler, et al., 1982).

3. Framework Questionnaire to analyze components of practice model framework. Autonomy was measured using the subscales of the JDS. Two items were included in the framework questionnaire to determine to what extent the subjects were satisfied with the amount of autonomy and the supports provided for autonomy on the nurses' working unit. Responses to these items were taken as a proxy measure of professionalism. The justification for using measures of autonomy as a proxy measure for professionalism

arose from the work of Tumulty, Jernigan, and Kohut (1995) who found that moral commitment to nursing was positively associated with the professional status of nurses while a lack of autonomy was positively associated with a lack of professionalism. Watts and O'Leary (1980) and Mundinger (1980), quoted in Langston (1990), stated that autonomy is an attribute that is considered essential to the professional nursing role.

Preferences for tasks were measured by items generated for this study, based on previous work by Landeweerd and Boumans (1994). Their scale measured the degree of task versus patient allocation ( $\alpha = .59$ ). Factor analysis revealed unidimensionality, with a high score indicating a high degree of task allocation and a low degree of patient allocation, and a low score indicating the opposite.

In the present study, subjects were requested to select the item(s) that describe(s) their unit's organizational model of nursing care. On five point scales, subjects were also asked to rate to what extent their work consists of direct vs. indirect patient care tasks, and how satisfied they are with that extent.

Satisfaction with the methods and types of communication and participative decision making were measured using a subscale consisting of two questions which ask respondents to rate their satisfaction on a five point scale with receiving and giving information and with interpersonal relationships.

The complexity and uncertainty of the health condition of the patients who comprise the nursing environment was measured by asking the respondents to describe the patient population on the unit as based on work by Allred et al. (1994).

The validity of the instrument was assessed in a pre-test with twenty-three nurses



from one of the hospitals involved in the study to provide a measure of content validity. Nurses commented on the content and clarity of the questionnaire. The average time for completion was five minutes. Reliability was established by using a test-retest performed by administering the questionnaire on one occasion and again one week later to ten nurses with a 95% response similarity. Finally, the interrater reliability of the instrument was checked by interviewing nurses about the items in the framework to analyze nursing models. The nurses were consistent in their agreement on the meaning of the items. See Appendix A for a copy of the questionnaires.

4. Demographic information. This was collected on age, education, and nursing experience. These factors were controlled for in subsequent partial correlation analyses.

#### Study Design

An ex post facto research design is appropriate for the correlational analysis of the data (Campbell and Stanley, 1970; McLaughlin and Marasculio, 1990).

#### Section II: Population, Sample and Procedures

The research population consisted of over 400 nurses who work in medical or surgical units of four McGill university teaching hospitals in Montreal, Quebec.

The investigator met the Nursing Directors of the four hospitals to explain the study to them and received their approval to conduct the study on the above nursing units. Next, the investigator scheduled meetings with the head nurse/nurse manager of the units in question to explain the study to them. Together, the investigator and head nurses modified the method for accrual as needed to fit the specifics of each nursing unit.

The method of accrual of subjects was as follows:

The nurse manager or designated personnel supplied a list of staff nurses for each unit so that the inclusion criteria can be applied. The inclusion criteria were:

1. Able to communicate in English or French,
2. Have worked on the unit for a minimum of two months,
3. Worked at least eight shifts a month on the unit.

The investigator prepared a bundle of packages for each unit. Instructions were given to each unit to distribute the questionnaires to the eligible nurses. A total of four hundred questionnaires were proportionately distributed among the participating units to aim for a response rate of approximately 50%. The number of eligible nurses on each unit was tabulated and a proportionate number per unit received the questionnaire.

A cover letter was given to all nurses, stating that the study was in partial fulfillment for a Ph.D. program and that only the completed doctoral dissertation would be available to hospital or university administration. The study participants were not identified by name and no responses were seen by other than the investigator and research assistants.

Consent to participate was inferred by the return of the completed questionnaire. It was possible to complete the questionnaire in about thirty-five minutes or less. Completed questionnaires were placed in an envelope located on each unit, which was then sent via hospital mail to the investigator, or collected by a research assistant.

Each hospital suggested how a monetary award could be given to the participating nursing units in acknowledgment of the time involved, particularly in light of the current stressful period of change in the hospitals' reorganization.

### Ethical Considerations

The study was presented for ethical review by the appropriate forums at McGill University, and the four hospitals involved. Confidentiality was maintained as the personnel at the hospitals did not have access to the raw data. Subjects were free to participate or not and the administration of the hospitals involved did not know who had or had not participated.

### Timetable

The period of data collection began in the spring of 1996 after the project received approval by the appropriate ethics committees of McGill University and each of the hospitals. The data were collected within a three months period, allowing two weeks for questionnaire completion, two weeks for follow-up reminders, and various meetings to explain the study to the nurses working on different rotations.

### Data Analysis

Data were analyzed using frequencies, correlations, analysis of variance, and regression where appropriate (Kerlinger, 1986).

## Chapter 4

### Findings

The purpose of this chapter is to present and discuss the findings of the study. The chapter is organized into three sections.

Section I presents the demographics of the sample.

Section II presents the results for each of the study questions.

Section III summarizes the findings.

One hundred and sixty-one questionnaires were received from the four hundred questionnaires which were distributed. Because of the extent of missing data, two questionnaires were eliminated, resulting in one hundred and fifty-nine usable questionnaires for a response rate of 40%. Although this response rate is less than the 50% anticipated, given the climate in the hospitals during the data collection process, the rate is acceptable. That the returns were as good as they were is due in large part to the presence of the research assistants who encouraged, reminded, and acknowledged the respondents.

#### Section I: Demographic Data

Table 1 presents the respondents' characteristics. The respondents consisted of full and part time nurses, from a wide range of age groups and educational levels. Basic data from one hospital allowed some comparisons to be made between respondents and non-respondents. The hospital nurses, as well as those in the study nurses both were between twenty-two and over sixty years of age and their seniority ranged from less than one year to more than twenty years. The average respondent was thirty-six years of age,

had been working four and a half years on the unit, and had eight years of experience in nursing. Seventy percent of the subjects were currently working full time.

**Table 1**

Frequency Distribution of the Respondents by Demographic Variables for the Study

Variable	N	%
Age		
20-29	49	31
30-39	57	36
40-49	29	18
>50	24	15
Nursing Experience		
<1 year	3	2
1-2 yrs.	12	8
3-5 yrs.	41	26
6-10 yrs.	34	21
10 yrs.	69	43
Work status		
Full-time	112	70
Part-time	36	23
Availability	11	7
No. of years on unit		
<1 year	15	9
1-2 yrs.	21	13
2-5 yrs.	47	29
5 yrs.+	76	48
Education		
Diploma	79	50
Bachelor's	69	44
Master's	11	6

One-half of the sample held university degrees, and the rest held either CEGEP or hospital diplomas. The demographic data for Quebec nurses for 1995 indicated that the average age of nurses was forty-one; one nurse in five is pursuing university studies; one hundred and ninety-three of 1,568 permits issued in 1995 were for nurses with a university education. Therefore, the sample of nurses consisted of more university prepared nurses than in the population of Quebec nurses, although a higher proportion of university prepared nurses work in large urban hospitals than in smaller or rural locations.

## Section II: Results

**Question One.** Are the characteristics of the work of nursing related to motivation and satisfaction as measured by the Job Diagnostic Survey (JDS) of the Job Characteristics Model (JCM)?

To ascertain if the data approximated a normal distribution so that parametric statistics could be used, means, standard deviations, range, and skewness index were obtained for each variable. All variables in the JDS were measured or transformed to a 7-point scale. The means and standard deviations are presented in Table 2. The table also presents American professional/technical normative data for the JDS scale established in 1979 (Oldham, Hackman, and Stepina, 1979). These norms provide a relatively stable set of norms for the interpretation of JDS scores. The scores from a sample of eighty-three American pediatric staff nurses (Holaday and Bullard, 1991) and those of two hundred and forty-six Quebec teachers (Barnabé and Burns, 1994) are also included for comparison.

**Table 2**

Means and Standard Deviations on JDS Scales for the Study Sample Compared to Other Studies

Variable	Study nurses		Quebec teachers		American professional norms		Paediatric nurses
	N = 159		N = 246		N = 658		N = 83
	M	SD	M	SD	M		M
Job characteristics							
Skill variety	5.2	1.3	5.5	1.0	5.4		5.5
Task identity	4.6	1.1	5.1	1.4	5.1		4.2
Significance	6.0	0.8	6.0	0.9	5.6		6.1
Autonomy	5.5	0.9	5.4	1.0	5.4		4.8
Feedback - job	5.0	1.0	5.0	1.2	5.1		4.8
Feedback - agents	3.8	1.3	3.4	1.4	4.2		3.9
Dealing with others	6.1	0.8	5.5	1.2	5.8		6.1
MPS	152.0	59.0	157.0	64.1	154.0		129.0
Psychological states							
Meaningfulness	5.4	0.8	5.6	0.8	5.4		5.6
Responsibility	5.3	0.7	5.0	1.1	5.8		4.4
Knowledge of results	5.2	0.9	5.0	1.1	5.0		4.6
Affective responses							
General satisfaction	4.6	0.1	4.8	1.1	4.9		4.3
Internal motivation	5.7	0.1	5.6	0.7	5.8		5.9
Growth satisfaction	5.0	1.0	5.2	0.8	5.1		5.1
Satisfaction with pay	3.8	0.1	4.3	1.5	4.4		2.7
Security	3.9	0.1	4.7	1.7	5.0		5.2
Social	5.4	0.9	5.0	1.0	5.5		5.7
Supervisory	4.8	0.1	4.7	1.3	4.9		4.7
Growth Need Strength (GNS)							
	4.8	1.0	4.8	0.8	5.6		4.6

The JDS scores from this study were similar to the normative data in many areas, even though the normative data were collected twenty years ago. The means of the present study were higher for the following: job significance, autonomy, knowledge of results, and dealing with others when compared with the American professional norms. This indicated that the nurses were aware of the significance of the work they do and the importance of their work with others. It also demonstrated that although many aspects of their work are standardized, they have freedom, responsibility and judgment for deciding how and when much of the work is accomplished. Nurses usually knew readily if their work was satisfactory or not.

Table 2a presents the responses of the study nurses in relation to those of the Quebec teachers.

**Table 2a**

A Comparison of Higher and Lower Scores on JDS Items Between the Study Nurses and Quebec Teachers

Nurses scores on	Higher	Lower than teachers
Job Characteristics	Autonomy Feedback agts Deal w/others	Skill variety Task identity MPS
Psychological States	Responsibility Knowledge of results	Meaningfulness
Affective Responses	Motivation Satisfaction w/social	General satisfaction Growth satisfaction Pay Security

The means of the following variables were lower than the means of the Quebec teachers,



but not for the sample of pediatric nurses who were particularly dissatisfied: Task Identity, Skill Variety, Meaningfulness, Growth Satisfaction, General Satisfaction, Pay, Job Security, and Job Choice which is a part of Growth Need Strength.

Task Identity includes having the opportunity to complete a whole and identifiable job from beginning to end. The low score on this item is interpreted as a reflection of the nature of hospital care in the present environment of constrained budgets and resources. Patients are referred to as 'quicker-sicker' because of the shorter lengths of hospitalization and the increased acuity of hospitalized patients. Nurses rarely are able to see the complete recovery of their patients as convalescence occurs most often away from the hospital setting. As Holaday and Bullard (1991) commented, "Given the whole, it is hard for nurses to identify what piece of the process was theirs. When the physician admits a child with pneumonia and discharges someone who has recovered, can the nurse see what contribution he or she made to that process?" (Holaday and Bullard, p.411).

Teachers scored higher on task identity than the nurses, perhaps indicating that nurses' jobs are less circumscribed and more variable. For example, nurses' tasks change according to the shift they work and according to whether they perform their work on a weekend or work day. Their tasks also vary according to the preferences of the medical staff. Thus, doing their job from beginning to end with a visible outcome was more problematic for the nurses than for the teachers who may teach only one grade or subject and are more able to observe the outcome of their work.

The score for skill variety may be related to the shorter lengths of stay of patients, which limits the variety of nursing skills that are utilized, compared to that of the teachers

who are free to utilize a variety of activities in their work.

The nurses' scores on the MPS were somewhat lower than the teachers. The nurses' scores on autonomy and feedback from the job, and task significance were high, but their scores on feedback from agents, skill variety, and task identity were low. Although the item, Dealing with Others, received a high score, it does not form part of the MPS.

The nurses' score on meaningfulness was the highest of the psychological states scores, yet lower than that of the teachers. The lesser degree to which the nurses experienced the job as meaningful, valuable and worthwhile may be a reflection of the characteristics of the work as seen through the scores on task identity and skill variety.

Experienced Responsibility for the work includes caring personally, and feeling responsible about whether or not the work gets done properly. That the nurses only agreed slightly with those statements may be a reflection of the difficulty in accessing complete information surrounding patients' treatment and follow-up, and the numerous staff who play a role in patient care. It has been suggested for the sample of Quebec teachers that their collective bargaining power through union activity may be at the expense of personal responsibility for the conduct of their work (Barnabé and Burns, 1994). Nurses would surely dispute this claim for themselves, but it remains a point for discussion and exploration.

General satisfaction reflects satisfaction with the overall aspects of the job, including the kind of work nurses are expected to perform. The scores indicate a mean response between neutral and slightly satisfied. Growth satisfaction, or the challenge, worthwhile satisfaction and opportunity for personal growth and development that the job

provides received a similar score to the national means, but slightly lower than the sample of teachers. Internal work motivation, measured as one's sense of personal satisfaction, positive opinions and feelings scored the same as the comparison groups, in the slightly satisfied to satisfied range.

Nurses in this sample could be classified as neutral to unsatisfied with their pay relative to what they contribute to the hospital. Dissatisfaction with salary level arises from nurses' view of their jobs as requiring a high degree of skill and having considerable significance for which their compensation is inadequate (Holaday and Bullard, 1991).

The JDS also measures two job characteristics that are not in the motivational theory of the JCM. They are Feedback from Agents and Dealing with Others. Feedback from Agents can supplement information on feedback from the job itself, while Dealing with Others reflects the extent to which the job requires work with others and can focus attention on the interconnections between sets of jobs.

Feedback from Agents received a particularly low score although it was higher than that of the teachers. The nurses felt that their superiors and co-workers did not let them know how well they were doing their jobs on a regular basis. It is noteworthy that although the nurses' score on satisfaction with job security in the present study was also low, reflecting accurately on the changing and uncertain nature of health care in Quebec at this time, their scores on feedback from supervisory staff and co-workers were still lower. To the contrary, the score for Dealing with Others received the highest score of any item on the JDS. The nurses knew that dealing with others in a cooperative fashion is an essential and crucial part of the work.

The Motivating Potential Score (MPS) summarizes the overall degree to which a job is objectively designed to maximize the likelihood of internal work motivation, growth satisfaction, and general satisfaction for the workers. The MPS scores were derived from the following formula: the scores for skill variety, task identity and task significance were summed and then divided by three and multiplied by the scores for autonomy and feedback. A high MPS indicates opportunities for satisfying personal growth at work. The range of possible scores on the MPS is from 7 to 343. The MPS of 152 for the nurses is similar to the national professional/technical norms, indicating that their jobs contained the characteristics measured by the JDS. As Hackman and Oldham (1980) stated, "A job that is high in motivating potential merely creates conditions such that if the job holder performs well he or she is likely to experience a reinforcing state of affairs as a consequence. While job characteristics set the stage for internal motivation, it is the behaviour of people that determines the final outcome."

The moderators that seem to distinguish between those who benefit from jobs with core job characteristics of the JCM and those who do not are:

1. The knowledge and training to do the job,
2. The psychological need for personal achievement and growth, called Growth Need Strength (GNS),
3. Satisfaction with the work context.

These moderators are thought to affect the relationship between the MPS and the outcomes, with those workers with high satisfaction with the work context and a high need for growth obtaining the strongest relationships. However, a study by Tiegs, Tetrick, and

Fried (1992) found no evidence that the GNS and the work context satisfactions jointly moderated any of the relations of the JCM. These findings cast doubt on the proposition that a person's reaction to either a particular job characteristic or a psychological state is jointly moderated by his or her desire for challenging work and satisfaction with a focal contextual aspect of the work environment (Tiegs, Tetrick and Fried, p.590).

Regardless of the criticism of the Growth Need Strength (GNS) as a moderator, it represents a desire to have a job that has growth-enhancing conditions and the opportunity to select jobs that offer those qualities. The total score on GNS is similar to the sample of teachers and lower than the professional norms. The responses for job choice indicated a slight preference for jobs that are innovative, creative, with freedom and independence to do the job in the way the nurse feels is best, and permits the full use of one's skills and abilities (mean 5.6, sd 0.12). Their ideal job is also one where there are opportunities to make important decisions and where responsibility is given to those who do the best work (mean 4.0, sd 0.06).

The nurses in the present study may have been interested in having jobs higher in the core job characteristics of the JCM but wary of actually having them for reasons not unlike those put forward by Holaday and Bullard:

First, nurses may feel they have been stretched by such factors as technology, and the acuity of the patient population. Second, satisfaction with the context satisfactions of pay, security, and supervision was also low, contributing perhaps to an unwillingness to risk more enriched work. Third, the relatively low expressed need for growth can also be interpreted as one way the nurse has adapted to the work situation. He or she has taken

steps to prevent burnout.

A second analysis examined the relationships between the job dimensions and the outcomes. In order to determine linear relationships among variables, Pearson's product-moment statistic was applied at several steps. First, the five core job dimensions were correlated with each other to determine whether they represented independent job dimensions. A similar analysis was conducted with the three critical psychological states of meaningfulness, responsibility, knowledge of results, and the three outcomes. The degree of shared association between these sets of variables appears in Table 3. The boxed scores represent the propositions of the Job Characteristics Model.

Table 4 presents the correlations for the American Normative Professional sample for comparison with the nurses' sample.

The first proposition of the Job Characteristics Model states that the job characteristics of skill variety, task identity, task significance, autonomy and feedback will be related to psychological states of experienced meaningfulness, responsibility and knowledge of work outcomes. The correlations found are not as strong as those reported by Hackman and Oldham, particularly in the area of the relationship between experienced meaningfulness and skill variety, task significance and identity. The correlations for the present study for experienced meaningfulness are .25, .19, .18 as compared to .51, .26, .43 for the American sample. The correlations are nonetheless all in the proposed direction, with autonomy being positively related to responsibility (.27 vs .41 for the two samples), and feedback to knowledge of results (.48 vs .54).

**Table 3**

## JDS Correlations of Study Nurses

Nurses	SkVar	TaskID	TaskSig	Aut	FbJob	ExpM	ExpR	KnR	GenSat	IW Mot	GrSat
SkVar											
TaskID	0.093										
TaskSig	.333**	0.155									
Aut	.338**	.368**	.316**								
FbJob	0.155	.518**	.342**	.462**							
ExpM	.251*	0.193	0.185	.272**	.328**						
ExpR	0.062	.247*	.292**	.272**	.273**	.374**					
KnR	0.08	0.181	0.115	.251*	.487**	.368**	.275**				
GenSat	0.075	0.209	-0.037	0.173	0.159	.529**	.260*	.293**			
IWMot	0.067	0.154	0.162	0.159	0.159	.264*	.328**	.333**	0.117		
GrSat	.318**	0.156	.298**	.381**	.281**	.526**	0.227	.291**	.480**	0.05	
MPS	.429**	.595**	.480**	.762**	.808**	.363**	.342**	.394**	0.184	.253*	.397**

Bonferonni corrected correlations (gives p value correlated for the number of tests) (Woods and Catanzato, 1988)

\*p &lt; .05

\*\*p &lt; .01

Proposed relationships are boxed

**Table 4**

Correlations as Found by Oldham, Hackman, and Stepina (1979)

	SkVar	TaskID	TaskSig	Aut	FbJob	ExpM	ExpR	KnR	IWM	GrS	GenS
SkVar											
TaskID	0.16										
TaskSig	0.21	0.2									
Aut	0.51	0.38	0.22								
FbJob	0.32	0.26	0.26	0.34							
ExpM	0.51	0.26	0.43	0.46	0.41						
ExpR	0.40	0.34	0.34	0.41	0.37	0.64					
KnR	0.12	0.21	0.21	0.26	0.54	0.33	0.32				
InWkMt	0.42	0.22	0.32	0.33	0.36	0.63	0.66	0.34			
GrwS	0.52	0.31	0.33	0.58	0.44	0.68	0.54	0.25	0.51		
GenS	0.42	0.22	0.24	0.54	0.37	0.66	0.48	0.36	0.56	0.67	

All correlations statistically significant at 0.01  
Proposed relationships are boxed



The JDS appears to tap the proposed relationship between the job characteristics and the psychological states although not in the exact same order as put forward by Hackman and Oldham. Task identity and task significance are more strongly correlated with experienced responsibility than with experienced meaningfulness. Autonomy is equally related to experienced meaningfulness and responsibility, perhaps reflecting the importance of autonomy to the nurses in this sample.

The second proposition of the model is that the critical psychological states will be significantly related to motivation and satisfaction outcomes. This relationship was borne out in all measures except one: growth satisfaction was only moderately related to experienced responsibility. Four of the job characteristics themselves are directly related to the outcome of growth satisfaction: skill variety, task significance, autonomy, and job feedback. Task identity and task significance are more strongly correlated with experienced responsibility than with experienced meaningfulness. The norms provided by Hackman and Oldham also displayed similar direct relationships between some of the job characteristics and job outcomes. The hypothesized relationships of the JCM are among the strongest in the correlation matrix and, thus, the nurses' scores on the JDS capture in a satisfactory manner the relationships proposed by the model.

The importance of autonomy and feedback to the nurses in the study is noteworthy. Autonomy is significantly related to a number of variables in the model: skill variety, task identity, task significance, job feedback, experienced meaningfulness and responsibility, knowledge of results, and growth satisfaction. Feedback is similarly related to task identity and significance, autonomy, experienced meaningfulness and

responsibility, and knowledge of results and growth satisfaction.

A major tenet of the JCM is that internal work motivation occurs when the psychological states are achieved through the presence of the specified job characteristics. This tenet is supported by the correlations in Table 3. The MPS, the combined score of the five job characteristics, is significantly related to the psychological states of experienced meaningfulness, responsibility and knowledge of results. The MPS is related but less significantly to the outcome of internal work motivation and growth satisfaction, and even less to general satisfaction.

In the nurses' sample, Task Significance and Experienced Meaningfulness, and Experienced Responsibility versus Autonomy and General Satisfaction failed to reach significance. However, the basic propositions of the model continued to be supported, although with modifications.

In summary, the nurses' high scores on job significance and autonomy, in conjunction with their low scores on responsibility and general satisfaction are noteworthy. The usefulness of the JDS as a measure of work motivation appears evident.

The relationship of the context satisfactions and the psychological states and the outcomes is found in Table 5 for the nurses and the American norms. Growth and general satisfaction were related to the context satisfactions of job security, pay, and satisfaction with co-workers and supervisors in all instances except that security was not related to general satisfaction. It is noteworthy that, similar to Herzberg's hygiene factors, internal work motivation was not related to any of the context satisfactions. Thus, while such factors contribute to satisfying jobs, their presence is not a guarantee of motivation. The

intrinsic nature of job satisfaction with regard to the context satisfactions is illustrated by the following two observations:

**Table 5**

A Comparison of Correlations of Nurses' and Oldham, Hackman, and Stepina Scores on Context Satisfaction, Psychological States, and Outcomes

Variable (H and O scores in brackets)	ExpM	ExpR	KnR	GenSat	InWM	GrSat
SatJobSec	(.33) .19	(.30) .08	(.31) .19	(.48) .22	(.51) .06	(.51) .29**
SatComp	(.26) .20	(.24) .23*	(.22) .06	(.42) .35**	(.22) .11	(.43) .26*
SatCowk	(.41) .40**	(.38) .22	(.32) .58**	(.40) .52**	(.40) .07	(.47) .58**
SatSup	(.39) .26*	(.32) .18	(.37) .43**	(.46) .48**	(.31) .05	(.47) .43**
** p > .01						
* p > .05						

1. The strongest relationships were between the context satisfactions with co-workers and supervisory support, and the psychological states and job outcomes.

2. Job security was not related to the psychological states, while security with pay was related to the state of experienced responsibility.

The correlations between the context satisfactions, and the psychological states and outcomes were generally higher in the results obtained by Hackman and Oldham. There was a noticeable difference between the low correlations of the context satisfactions and internal work motivation obtained in the nurses' sample and the higher ones of Hackman and Oldham's. That none of the context satisfactions were significantly related to motivation indicated that nurses depend on intrinsic factors and the significance

they attach to their work for their internal motivation. The largest correlations for the nurses' sample were, however, greater than those found in the comparable Hackman and Oldham items and consisted of satisfaction with co-workers and supervisors. Factors related to dealing with others and communication appear to be particularly important for the nurses in this study.

To determine whether the factors in the JDS discriminated between the four hospitals, means and standard deviations were computed for each hospital as presented in Table 6. An ANOVA was carried out on the JDS dimensions and on the demographic characteristics of the nurses across the four hospitals. Means varied only slightly on some dimensions, and there appeared to be a general consistency of scores.

Tables 7 and 8 provide the results of the ANOVA for those few dimensions that differed significantly from hospital to hospital.

The JDS did not appear to discriminate between hospitals. Only General Satisfaction differed significantly among the four hospitals. The demographic variable, years of experience in nursing, narrowly missed showing a statistically significant difference ( $p = .06$ ). The hospitals which scored higher on General Satisfaction also employed more nurses with several years of experience in nursing. Within each hospital, a number of nursing units comprised the sample of medical-surgical nurses, and it may be that it is the differences across units as opposed to across hospitals that distinguish one

from the other.

**Table 6**

Means and Standard Deviations on JDS Scale, and Intent to Leave for Four Hospitals  
By Hospital

Variable	Total sample		Hospitals by Number							
			1		2		3		4	
	N=159		N = 42		N = 55		N = 22		N = 40	
	M	SD	M	SD	M	SD	M	SD	M	SD
Skill Var	5.2	1.3	5.2	1.2	4.9	2	5.1	0.8	5.4	1.3
Task ID	4.6	1.1	4.5	0.8	4.7	1.5	4.4	1.2	4.7	0.9
Task Sig	6	0.8	5.8	0.7	6	0.59	6.2	0.5	5.9	0.8
Autonomy	5.5	0.9	5.5	0.8	5.5	0.98	5.7	0.7	5.4	0.9
Fdbk Job	5	1	4.8	0.9	5	1	5	1.1	5.2	0.7
Deal Others	6.1	0.8	5.9	1	6.1	0.82	5.9	0.7	6.2	0.7
Exp M	5.4	0.8	5.3	0.8	5.5	0.46	5.3	0.8	5.5	0.6
Exp Resp	5.3	0.7	5.2	0.4	5.3	0.56	5.3	0.5	5.4	0.6
Knowledge	5.2	0.9	5.1	.97	5.1	.65	5.0	1.6	5.3	.76
In W Mot	5.7	0.1	5.7	.37	5.6	.40	5.9	.31	5.7	.54
Gr Sat	5.0	.96	5.2	.89	5.2	.80	4.8	.15	5.0	.10
Gen Sat	4.6	.08	4.6	.91	4.9	.80	4.0	1.6	4.5	1.3
Sat Sec	3.9	0.1	4.3	1.6	4.0	1.5	3.9	1.3	3.3	1.8
Sat Sup	4.8	0.1	5.2	1.0	4.9	1.2	4.5	1.1	4.6	1.2
Sat Co-W	5.4	0.9	5.6	6.5	5.5	.71	4.9	1.1	5.3	.91
Sat Pay	3.8	0.1	4.1	1.3	3.8	1.5	3.7	1.5	3.6	1.5
Intent	3.1	2.8	3.1	3.0	2.8	2.2	3.4	2.4	3.1	3.4

The climate of health care changes, downsizing, and reorganizing hospital care in Montreal was

common to all the participating hospitals. Thus, differences across units may have been obviated as several units were combined in each hospital. The theory of the JCM was developed as a guide for research and an aid in planning for changes in work systems, rather than a tool to provide a complete picture of the motivational effects of job characteristics (Barnabé and Burns, 1994). The JDS indicated that the nurses who work in medical-surgical nursing units of the four hospitals in the study have generally homogeneous attitudes toward their work of nursing.

**Table 7**

Means of General Satisfaction and Years of Experience in Four Hospitals

	Hospitals							
	1		2		3		4	
	N = 42		N = 55		N = 22		N = 40	
	M	SD	M	SD	M	SD	M	SD
General Satisfaction	4.64	.91	4.87	.80	3.97	1.61	4.54	1.28
Experience	4.02	1.14	4.03	1.29	3.41	1.40	4.15	.85

**Table 8**

Analysis of Variance of General Satisfaction for Four Hospitals

General Satisfaction				
Source Prob	Sum Sqres	DF	Mean Sqres	F-Ratio
Between groups	2.9414	3	4.3138	4.0747**
Within groups	164.0946	155	1.0587	
Total	177.036	158		

\*\*p < .01 (F = 3.92)

**Question Two.** Is there a relationship between motivation, and intent to leave and

satisfaction in the work of nursing?

The mean score obtained on the Intent to Turnover Scale, which has a midpoint of 3.5, was 3.10 (standard deviation of 2.01). The scale has a range of from 1 to 7, with 7 indicating a strong likelihood of looking for a new job in the next year. The results of the Intent to Turnover Scale suggested that most nurses did not plan to leave or look for a new job in the next year.

Table 9 presents the relationship between intent to leave, job outcomes, and context satisfactions. General satisfaction, pay, and security reached significance with intent to leave.

**Table 9**

Partial Correlations for Work Outcomes and Context Satisfaction with Intent to Leave, Controlling for Length of Experience, Age, and Education

Work outcomes	Intent to leave	(t-test)
Work motivation	0.09	0.2801
General satisfaction	-0.43	0.0001* *
Satisfaction with		
Growth	-0.11	0.1722
Pay	0.22	0.0048 *
Security	-0.26	0.0011**
Co-workers	-0.05	0.5572
Supervisory	0.09	0.2901
*p ≤ .01		
**p ≤ .001		

A partial correlation coefficient is the coefficient of correlation between two

variables, with one or more other variables held constant. A controlled variable is an extraneous variable whose value is held constant for all conditions in the statistic; values for length of experience, age, and experience in nursing were held constant (Olson, 1987). The selected demographic variables were forced into the equation, following which the contribution of the other variables, which were added at the same time, was evaluated.

Table 10 presents correlations between intent to leave and the attributes of nursing care delivery systems controlling for demographic data of age, education, full or part-time work, and years of nursing experience.

**Table 10**

Partial Correlations for Attributes of Nursing Systems and Intent to Leave, Controlling for Age, Education, Full/Part Time and Length of Service

Nursing work dimensions	Intent to leave
Nursing model	0.108
Feedback from agents	-.121*
Support for autonomy	.142*
Time on non-patient tasks	0.029
Time on patient tasks	-0.073
Unit complexity	-.206*
Exchanging information	-0.118
Interpersonal relationships	.123*
*p ≤ .05	

The complexity of the patient population on the nursing unit, feedback from



agents, and support for autonomy were related to the intent to leave. As the patient population became more complex, and feedback from agents and support for autonomy diminished, nurses thought more about leaving.

The questionnaire items on satisfaction with support for autonomy, interpersonal relationships, and exchanging information are reverse scored with the highest scores indicating dissatisfaction. A high score for unit complexity indicates that the patient population is rarely complex or subject to frequent unanticipated events and problems. As the unit becomes more complex, the nurses' intent to leave increased. Thus, there was a relationship with intent to leave and satisfaction, but not with motivation. Pay, security, support for autonomy, feedback from agents, and interpersonal relationships were also significantly related to an intent to leave.

**Question Three.** Is there a relationship between the attributes of nursing care delivery systems and motivation?

The vast majority (97%) of nurses selected total patient care/primary nursing as the description of the nursing care delivery system that described best how both they and their unit provided patient care. However, there are differences within that system as it is applied from unit to unit. Table 11 presents the means and standard deviations of nurses' opinions of the attributes of nursing care delivery systems.

The data indicated that nurses in medical-surgical areas spent about half of their time on patient care and considerably less than half of their time on non-patient care. They expressed themselves to be somewhat satisfied with their support for autonomy and felt they had a reasonable amount of autonomy. Satisfaction with the two

aspects of communication was present while not overwhelming. The mean score and wide standard deviation for how complex the patient population was, indicated many differences in the status of the patient populations.

**Table 11**

Means and Standard Deviations of the Questions on Nursing Views of the Attributes of Nursing Care Delivery Systems and Their Satisfaction with Those Attributes

Attributes	M	SD	Scale
<b>Actual:</b>			
Time spent on patient care	2.7	1.2	1 = All of it 7 = None of it
Time spent on non-patient care	4.8	1.18	1 = All of it 7 = None of it
Amount of Autonomy	4.8	.44	0 = No autonomy 7 = Total autonomy
Complexity of patient population	2.4	1.35	1 = Usually 5 = Rarely
<b>Satisfaction with:</b>			
Support for Autonomy	2.6	1.09	1 = Completely satisfied 5 = Very dissatisfied
Communication			
Information exchange	2.9	.86	1 = Completely satisfied 5 = Very dissatisfied
Interpersonal relationships	2.6	.94	1 = Completely satisfied 5 = Very dissatisfied

Only 13% of the nurses spent all of their time on patient care on a typical day, and about 30% spent less than half of their time on patient care. Thus, about 70% spent more

than half of their time on patient care. Thirty-three percent of the sample felt this was too little time but 58% felt it was about right. Non-patient care consumed about half or more of a typical day for about 30 % of the nurses, and as expected, only 15 % felt that this was too little.

Autonomy was defined in the questionnaire as the amount of work-related independence, initiative, and freedom in decision making about patient care. Deci and Flaste (1995) described autonomy support as relating to others as active agents who are worthy of support, rather than objects to be manipulated. Consistent with the measure of autonomy in the JDS, the nurses rated their level of autonomy as high. Twenty-seven percent felt that the amount of autonomy they had was too low and no one felt it was too much. Support for autonomy, which includes physical resources and acceptance of one's decisions by others, is necessary to allow it to be experienced in practice, and 75% were satisfied with their level of support.

Nurses were asked to describe the level of complexity of their patient population. Complexity refers to the patient population as being medically or surgically complicated and subject to frequent, unanticipated events and problems. The answers seemed to reflect a thoughtful attempt toward accuracy and honesty. Thirty-four percent felt their patients were usually complex and 40% felt that the patients on their units were only sometimes to rarely so.

The two aspects of communication, giving and receiving information and interpersonal relationships were found to vary widely. Only 17% were dissatisfied with the interpersonal relationships on their nursing units, but 27% were dissatisfied with

receiving and giving information.

Table 12 shows the correlations between the attributes of nursing care delivery systems in order to determine whether relationships exist between the various attributes.

**Table 12**

Correlations Between Nursing Care Delivery Attributes from Nursing Framework

	Pt care	Non-pt care	Support for Autonomy	Complex Unit	Satisfaction Info	with Rel'ship
Pt care	1					
Non-pt care	-.50**	1				
<b>Support for:</b>						
Autonomy	0.03	-0.05	1			
Complex Unit	.23**	-.12*	-0.01	1		
<b>Satisfaction with:</b>						
Info	-0.14	.19*	.41**	-0.13	1	
Rel'ships	-0.02	0.03	0.10	0.01	.45**	1

\*p < .05    \*\*p < .01

The more complex the patient population, the more time is spent on patient care and less time on non-patient care. As more time is spent on non-patient care, there is less satisfaction with the exchange of information. The complexity of the patient population was only related to the amount of time spent on patient/non-patient care.

The more time spent on non-patient care, the more dissatisfied nurses were with the giving and receiving of information. Or, nurses who are dissatisfied with the exchange of information may spend more time on non-patient care.

Satisfaction with support for autonomy was positively related to satisfaction with receiving and giving information. Access to information may generally be regarded as a support for autonomy. Whether there is a link between satisfaction with support for autonomy and the exchange of information, time spent on patient care, and the complexity of the patient population has not been determined by this study. Certainly, the links between satisfaction with support for autonomy and receiving and giving information are strong, as are the links between the time spent on patient care and the complexity of the patient population.

Table 13 examines the relationships between the attributes of nursing care delivery systems and job outcomes and psychological states, as measured by the JDS.

**Table 13**

Partial Correlations for Attributes of Nursing Systems and Job Outcomes

Nursing work dimensions	ExpM	ExpResp	KnRes	GenSat	InWM
Nursing model	0.04	0.05	0.03	0.09	0.05
Feedback from agents	.28**	0.05	.24*	.21*	0.02
<b>Actual:</b>					
Time on non-patient tasks	0.04	0.12	0.15	0.01	0.10
Time on patient tasks	0.11	- .18*	-0.05	.15*	0.01
<b>Satisfaction with:</b>					
Support for autonomy	.27**	0.092	.22*	.29**	- .02
Exchanging information	0.22	0.19	.29**	.19*	0.06
Interpersonal relationships	0.09	0.10	0.07	0.11	-.01
*p<.05    **p<.01					

Support for autonomy, time spent on patient care, and the exchange of

information all related significantly to one or more of the psychological states of experienced meaningfulness, knowledge of results, or experienced responsibility. Support for autonomy was significantly related to both experienced meaningfulness and knowledge of results. The outcome of general satisfaction was directly related to several of the nursing care attributes; specifically, the amount of time nurses spend on patient care, support for autonomy, feedback from agents, and the exchange of information.

The more time for patient care, the more satisfied nurses felt. Nurses on units where the patient population was described as being rarely complex and not subject to unanticipated events and problems tended to be more satisfied. Both of these items, the nature of the patient population and the time for patient care may represent the sense of role overload and help to understand its dimensions. More time for patient care tasks as opposed to non-patient care tasks and/or a patient population that is stable may help to minimize the pressure of having too many patients and too much work to perform in a limited amount of time. Patient care and non-patient care were not defined in the questionnaire but left to the interpretation of the respondents, perhaps leading to an overlap in how the two activities were defined by the nurses.

The more satisfied the nurses were with the amount of support for autonomy available to them on their unit, the more satisfied they were with the work in general. The aspect of communication, satisfaction with receiving and giving information, was also related to general work satisfaction.

The outcome variable of internal work motivation was not related to any of the characteristics in the nursing care delivery systems. In Table 3, internal work motivation

was only significantly related to the psychological dimensions of experienced meaningfulness, responsibility, and knowledge of results. It may, therefore, be that the attributes of nursing care delivery systems exert their effects through the creation of internal psychological states and general satisfaction as observed in Table 13. Since internal motivation is closely tied to the feelings a worker has about how he or she performs on the job, good performance can be an occasion for self-reward and a sense of self-esteem which becomes a reason to continue to do well. Internal motivation appears to be strongly related to feelings of self-worth and self-esteem, as evidenced by the JDS items of, "my own feelings", "my opinion of myself", "my personal satisfaction", and "feeling good and happy." However, in nursing it appears to be difficult to know to what extent one's performance has been good, given the number of others involved in the task of patient care and the presence of organizational obstacles. The nature of nursing education, the hierarchal structure of hospital management and organizations, and the lack of perceived support for autonomy and feedback may contribute to difficulties with self-esteem (Schwab, 1996). Such concerns with self-esteem may be related to levels of internal work motivation.

There are studies that may shed some light on the strength of the link between motivation and the affective states. Nurses were found to have strong feelings of affiliation and commitment to nursing, but not to some of the characteristics of the work of nursing (Carnevali, 1994), and Stelling (1992) found in her study on the invisible work of nursing that nurses are troubled by the lack of intrinsic as well as extrinsic rewards for their work. In a major study done on factors affecting the transition of nurses from learner

to practising nurse, nurses were found to suffer a loss of self-esteem as their education progressed in sharp contrast to students in other professional training programs whose self-esteem rose in tandem with their education (Kramer, 1981).

General satisfaction was significantly related to aspects of communication, time for patient care, support for autonomy, and a nursing unit where the patient population was rarely complex. Thus, while the JCM received support for its premise that the outcome of internal work motivation was mediated by the psychological states which were in turn related to the job characteristics, this mediating role was not as apparent in the outcome of general satisfaction which was related both to the nursing work dimensions and to the psychological states. Only one dimension, unit complexity, influenced general satisfaction directly and not via an intermediating psychological variable. Since unit complexity is an environmental condition rather than a core job attribute, it clearly impacts on satisfaction directly.

To further explore and understand the relation of the core job characteristics of the JCM and those attributes of nursing care delivery systems theoretically related to the core job characteristics of nursing, Table 14 presents a correlation matrix of the two sets of dimensions.

Satisfaction with the time available for patient or non-patient care was not significantly related to any of the JCM job characteristics. Support for autonomy was significantly related to skill variety, task identity, autonomy, and feedback both from the job and from agents, indicating its importance to the core job characteristics.



**Table 14**

## Correlation Matrix of Nursing Care Attributes and Core Job Characteristics

	Time pt care	Time non- pt care	Sup aut	Complex	Info	Rel-ships
SkVar	0.136	0.019	.248**	-.476**	0.129	0.026
TaskID	-.027	0.034	.228**	.132	.270**	0.123
TaskSig	0.052	0.045	.021	-0.084	0.021	0.044
Aut	-0.045	.189*	.409**	-0.062	.258**	0.065
Fdback job	.001	0.105	.241**	.090	.242**	-0.155
Fdback agents	0.129	-0.032	.299**	.043	.193*	-0.190*
Bonferonni correction (gives p value corrected for the number of tests) (Woods and Catanzaro, 1988)						
*p ≤ .05						
**p ≤ .01						

Only task significance was unrelated to support for autonomy. The complexity of the patient population was significantly related to skill variety as would be expected when a number of skills and abilities are required. The exchange of information was statistically significantly related to task identity, autonomy, and feedback from the job and agents. It appears that the specific attributes of support for autonomy and communication factors may help in understanding the nature of the core job characteristics of the JCM in the work of nursing.

Table 15 focuses on the significant relationships between autonomy and support for autonomy, and factors from the JDS and nursing attributes. Support for autonomy and autonomy were significantly correlated with four of the five core job dimensions, and with the nursing care attribute of Giving and Receiving Information systems. Autonomy

and the factors that lend it support have been particularly emphasized as two attributes essential to the successful practice of nursing care. Their relationships to the variables of the JDS appear to legitimize nurses' numerous requests for autonomy (Clifford and Horvath, 1990).

**Table 15**

Significant Correlations Between Two Autonomy Factors, Variables from the JDS, and Information Exchange

	Support for Autonomy	Amount of Autonomy
Info exchange	.41**	.26**
Skill variety	.25**	.34**
Task Significance	.02	.32*
Task identity	.23**	.37**
Fdb. job	.24**	.46**
Fdb. agents	.30**	.32**
*p ≤ .05		
**p ≤ .01		

A regression analysis was conducted to examine the amount of variation contributed by the attributes of nursing care delivery systems to the outcomes of satisfaction and internal work motivation. One item from the JDS on feedback from agents was included to probe the communication dimension more fully. Multiple regression is a multivariate technique for determining the correlation between a criterion

or dependent variable and some combination of two or more predictor or independent variables (Anderson, 1995). The most powerful predictor of the dependent variable is followed by those determined on the basis of how well they improve upon the prediction achieved by the first variable. To qualify as a good second predictor a variable should correlate as little as possible with the first predictor variable, but as highly as possible with the dependent variable. The multiple correlation coefficient ( $R$ ) measures the magnitude of the relationship between the variables in question.

Table 16 shows that for Growth Satisfaction, the multiple regression coefficient ( $R$ ) for support for autonomy and feedback from agents is .49. With this level of correlation, a crude group prediction may be achieved, although only about 25% of the common variance has been accounted for (Anderson, 1995, p.624). A better level of prediction is seen in the  $R$  of .58 achieved by the factors that contribute to General Satisfaction. Following the pattern previously observed with the factor of Internal Work Motivation, 4 % of the variance in the measure of Motivation is accounted for by Feedback from Agents.

The outcomes of general and growth satisfaction are both influenced by the nursing delivery system attributes of support for autonomy. Years of experience appears to make a small contribution to General Satisfaction. Support for autonomy, communication and feedback, time for patient care, and the lack of complexity of the patient population all contribute to general satisfaction. The intent to leave is affected by all of the nursing attributes, but particularly the exchange of information.

**Table 16**

Regression Analysis for the Influence of Attributes of Nursing Care Delivery Systems and Demographic Variables on the Outcomes of the JCM and Intent to Leave

Variable	B Coef	Multiple R	Standard error (B)	t-value
Growth Satisfaction		0.49		
Support for autonomy	-0.27		0.89	-4.40**
Feedback from agents	0.21		0.86	3.66**
Internal Work Motivation		0.21		
Feedback from the job	0.15		0.63	2.72
General Satisfaction		0.58		
Support for autonomy	-0.24		0.07	-3.35**
Exchange of information	-0.3		0.09	-3.25**
Feedback from agents	0.25		0.06	2.62
Complexity of unit	0.15		0.05	2.86*
Time on patient care	-0.28		0.12	-2.27
Years of experience	0.12		0.06	1.85
Intent to leave		0.42		
Time on patient care	0.21			1.33
Time on non-patient care	-0.07			0.9
Support for autonomy	0.23			-0.35
Exchange of information	0.26			-2.58*
Complexity of unit	-0.26			1.46

\*p<.05

\*\*p<.01

**Question 4.** Are there significant differences between the means obtained on the JCM, the "Intent to Turnover Scale", and the demographic variables?

The scores on the JDS and the "Intent to Turnover Scale" were examined according to age, educational preparation, and years of experience in nursing. ANOVA's were carried out on each of the dimensions of the JCM and the demographics of age, years of experience in nursing and education. The following tables report the findings that reached or nearly reached statistical significance at the 0.05 level.

**Table 17**

Analysis of Variance of Age and Task Significance

Source prob	Sum Sqres	Age DF	Mean Sqres	F-Ratio
Between groups	4.9153	3	1.6484	2.5376
Within groups	100.687	155	0.6496	
Total	105.632	158		
*p < .05 (F = 2.67)				
p = .0587				

**Table 18**

Analysis of Variance of Age and General Satisfaction

Source prob	Sum Sqres	Age DF	Mean Sqres	F-Ratio
Between groups	9.7237	3	3.2412	3.0027*
Within groups	167.3123	155	1.0794	
Total	177.036	158		
*p < .05 (F = 2.67)				

**Table 19**

Analysis of Variance of Age and Intent to Leave

Source prob	Sum Sqres	Age DF	Mean Sqres	F-Ratio
Between groups	23.6328	3	7.8776	2.9888*
Within groups	408.5349	155	2.6357	
Total	432.1677	158		

\* $p < .05$  ( $F = 2.67$ )

There were four categories for age (20-29, 30-39, 40-49, and 50 and over). The oldest group had more general satisfaction than the younger two groups, and also had less intention to leave the profession ( $p < .05$ ). The oldest group experienced less significance in their work than the other younger groups, although the difference narrowly missed significance at the  $p < .05$  level. It may be that as the years go by, the sense of importance of their work is either minimized or taken for granted by the older nurses.

**Table 20**

Analysis of Variance of Years of Experience in Nursing and Feedback

Source prob	Sum Sqres	Age DF	Mean Sqres	F-Ratio
Between groups	7.0483	3	2.3494	2.5715
Within groups	141.6143	155	0.9136	
Total	148.6626	158		

\* $p < .05$  ( $F = 2.67$ ) $p = 0.0562$

**Table 21**

Analysis of Variance of Years of Experience in Nursing and General Satisfaction

Source prob	Sum Sqres	Age DF	Mean Sqres	F-Ratio
Between groups	8.3808	3	2.7936	2.5674
Within groups	168.6551	155	1.0881	
Total	177.036	158		

\*p &lt; .05 (F = 2.67)

p = 0.0565

**Table 22**

Analysis of Variance of Years of Experience and Intent to Leave

Source prob	Sum Sqres	Age DF	Mean Sqres	F-Ratio
Between groups	27.7422	3	0.2474	3.4678*
Within groups	413.334	155	2.6667	
Total	441.0761	158		

\*p &lt; .05 (F = 2.67)

**Table 23**

Analysis of Variance of Years of Experience and Task Identity

Source prob	Sum Sqres	Age DF	Mean Sqres	F-Ratio
Between groups	9.5696	3	3.1899	2.9047*
Within groups	170.2166	155	1.0982	
Total	179.7862	158		

\*p &lt; .05 (F = 2.67)

Years of experience in nursing showed some similarities with age in that nurses with the most years of experience in nursing were less likely to leave and more generally satisfied than nurses with fewer years. The group of nurses with the least experience displayed less feedback from the job and task identity, although the results from feedback narrowly failed to achieve statistical significance. The more years of experience, the more the nurses in this sample felt satisfied with their jobs.

Education was not found to have any impact on the dimensions of the JCM. The education categories consisted of the presence or absence of a baccalaureate or higher degree.

### Section III: Summary

The JCM was found to be a useful diagnostic tool and model to examine factors affecting the motivation and satisfaction of nurses in four Montreal teaching hospitals. Additional attributes of nursing care delivery systems seemed to be helpful in identifying areas specific to nursing that contribute to satisfaction and the intent to leave, although they did not contribute to Internal Work Motivation. The JDS identified how nursing differed from other professional and technical occupations. The JDS did not, however, discriminate among the four hospitals in the study except for the dimension of General Satisfaction.

The relationships as specified in the JCM were borne out by the study. The three psychological variables were best related to the outcomes and mediated between the five core job characteristics and the outcomes.

The attributes of nursing care delivery systems derived from the literature as being



theoretically related to the outcomes of motivation and satisfaction were found to contribute to the JCM outcomes of General Satisfaction and Growth Satisfaction, but not to Internal Work Motivation.

Internal Work Motivation was not related to any of the context satisfactions or any of the attributes of nursing care delivery systems. Similarly, intent to leave was not correlated with motivation. Only job feedback accounted for a small amount of the variance in motivation which was positively correlated with each of the three psychological states. It appears that internal work motivation is a function of factors related to self esteem and self worth that may be enhanced via the mediating states of experienced meaningfulness, responsibility, and knowledge of results. Motivation as a psychological entity results from the inner feelings engendered when core job characteristics are present.

The attributes of the delivery systems of support for autonomy, communication, time spent on patient and non-patient care, and the complexity of the patient population were related. These factors contributed to explaining a significant portion of the variance in general satisfaction, while only support for autonomy accounted for some of the variance in Growth Satisfaction.

The environmental variable called complexity of the patient population was related to several of the nursing care attributes via the time spent on nursing and non-nursing tasks. This finding underscores the role of the environment in determining how job characteristics are rated.

Both autonomy and support for autonomy were related to a number of variables

from the JDS and the attributes framework. The strength of the concept of wanting autonomy in conjunction with the need to have it supported gives rise to some potentially important implications for nursing and fits within the JCM.

Years of experience in nursing and age were the two demographic variables that were related to the results of the JDS. More satisfaction was correlated with more years of experience. Intent to leave one's position and look for a new job in the coming year were related to general satisfaction, pay, security, feedback, support for autonomy, and communication.

There was not one definable model of nursing care delivery that could be associated with the dimensions of the JCM, although the subjects were well able to describe their work according to the components of care that are common to all nursing delivery models. The broad category of primary nursing/total patient care was selected by over 90% of the nurses, however, the dimensions of the model varied widely. The labelling of a practice model neither describes nor defines the model adequately.

## Chapter 5

### Discussion

The purpose of the study was to describe the relationship between motivation, job satisfaction, attributes of nursing care delivery systems, and intent to leave, within the work of nursing and to consider the applicability and usefulness of the Job Characteristics Model of work motivation to the work of nursing in four McGill University teaching hospitals in Montreal, Canada. The chapter is organized into sections:

Section I discusses the findings in relation to each research question. Section II presents a discussion on job redesign as an outcome of the scores on the JDS. Section III focuses on the study implications for practice and research. Section IV is a general conclusion.

### Section I

The first research question was:

Are the characteristics of the work of nursing related to motivation and satisfaction as measured by the Job Diagnostic Survey of the Job Characteristics model?

The propositions of the Job Characteristics Model were generally supported by the study data. The three psychological states were best correlated with the three outcomes, and better than with any of the five core job characteristics. Of the three outcomes, growth satisfaction was most significantly correlated with the intervening psychological state of experienced meaningfulness although it was also significantly correlated with four of the five core job characteristics. Autonomy was correlated with Experienced Responsibility, Job Feedback with Knowledge of Results, and Skill Variety with

Experienced Meaningfulness. Task Identity and Task Significance were not significantly correlated with Experienced Meaningfulness as the JCM proposed, and Experienced Responsibility was more highly correlated with both Task Significance and Feedback from the Job than with Autonomy. General Satisfaction and Internal Work Motivation were significantly correlated with the three psychological states and not with any of the core job characteristics.

Hackman and Oldham describe the psychological states as being “the causal core of the model,” and the job characteristics were identified to serve the states, not the other way around (Johns, Xie, and Fang, 1992, p.658). The relationship between the core job characteristics and the psychological states also confirmed the model. The link was strong between autonomy and experienced responsibility, and between job feedback and knowledge of results, but weaker for the impact of skill variety, task identity and task significance on experienced meaningfulness. Autonomy and Job Feedback each correlated more strongly than the other three task items on experienced meaningfulness. Task Identity and Task Significance in turn also correlated more strongly with experienced responsibility than with experienced meaningfulness. Thus, although the psychological states functioned as the crux of the model, they did so in a fashion other than that proposed by Hackman and Oldham.

The data indicates relatively good support for the JCM, with the following basic anomalies which are similar to those found by Johns, Xie, and Fang in their study of 300 mid to lower level managers. First, experienced meaningfulness appears in both studies to be a particularly encompassing psychological state, reflecting substantial unspecified

associations with autonomy and feedback. Knowing the psychological impact of various job dimensions, according to Johns et al., enables us to do a better job of predicting the attitudinal or quasi-behavioural outcomes of those dimensions. To the nurses in this study, the significance of the work of nursing is a strong given, as is the link between responsibility and the nature and importance of the task.

One anomaly to the tenets of the model was growth satisfaction which was responsive to several job dimensions in both this study and John's et al. (1992). Growth satisfaction is a particularly sensitive outcome in both studies, reflecting direct effects from two of the three expected psychological states, and from all of the core job characteristics except task identity.

Feedback and knowledge of results achieved the strongest correlations between job characteristics and psychological states in the present study. In similar fashion to Hackman and Oldham and John's et al., this study found experienced responsibility to be problematic as it was influenced by several job dimensions besides autonomy. Nonetheless, the psychological states do play a leading role in the model even though the data violate the model in specific instances (Johns et al., p. 672).

Hackman and Oldham used the analogy of a game of golf to present the job characteristics in a successful scenario. "Consider for example, the game of golf. Knowledge of results is direct and immediate: the player hits the ball and sees at once where it goes. Moreover, tallies of scores for each hole played are kept, providing cumulative and comparative data about performance effectiveness. Experienced personal responsibility for the outcomes also is clear and high, despite the tendency of golfers

sometimes to claim that the slice was due to someone whispering behind the tee, or perhaps due to a little puff of wind that came up 100 yards down the fairway just after the ball had been hit. Experienced meaningfulness is also high, despite the fact that the task is itself mostly devoid of cosmic significance. So in golf the three psychological states are present, and internal motivation among regular golfers is usually quite high." (p. 74).

The authors continue to explain that experienced meaningfulness in golf arises as there are continuous opportunities for players to express and test their personal skills and abilities. Moreover, this challenge to their skills is often reinforced by golfing partners.

If we compare the job of nursing to the game of golf, some clear differences emerge. The task of nursing has great meaning, and although the nurse is personally responsible for specific tasks, he or she is deprived of being responsible for the work outcomes in the larger sense, and is frequently protected from real data about how well she or he is performing. The sense of general satisfaction is denied. Further, nurses accept very clearly that they are to be autonomous, but are in a "catch-22" situation of lacking support for autonomy and the information and the feedback necessary to make autonomy a reality. From another perspective, nurses want to be autonomous or to have control over their practice, but their understanding of the boundaries of their autonomy and its relation to accountability may be limited (Clifford and Horvath, 1990).

In summary, the job characteristics known to increase motivation and satisfaction in the JCM are present in the work of nursing in varying degrees, and are related to the outcomes of motivation and satisfaction through the mediating psychological states.

A significant relationship existed between the context satisfactions of security,

pay, co-workers, and supervision, and the outcomes of general and growth satisfaction, but not internal work motivation. The experienced psychological states of experienced meaningfulness and knowledge of results were related to the context satisfactions of supervision and co-workers, but not to those of pay and security.

The context satisfactions were not found to have a moderating effect on any of the relations of the JCM in a study by Tiegs, Tedrick, and Fried, (1992). Therefore, satisfaction with a contextual aspect of the work such as pay or security was not thought to moderate one's reaction to the job. However, the importance of context satisfactions may still be dependent on the work outcomes, as another more general factor may underlie the employee's perception of the work environment (Tiegs, Tedrick, and Fried, p. 590). For example, a common higher-order factor representing an individual's overall affective orientation to his or her work may link these contextual measures to the job outcomes.

It is clear in the present study that the significance of the three factors of autonomy, significance, and meaningfulness in the work of nursing play an important role in the nurses' perception of their jobs. Given the climate of uncertainty about job security and pay, the stronger relationship between satisfaction with co-workers and supervision than between security and pay with the psychological states is remarkable.

When asked to choose between increased pay or the same pay and more time off, nurses chose the option of more time off (Blegen et al., 1993). The most meaningful rewards for recognition of work in a random sample of three hundred and forty-one nurses were pay commensurate with performance, private verbal feedback, and written

acknowledgement. Nurses have rated internal intrinsic rewards as equal to or better than external rewards which are not forthcoming from society (Buscherhof and Seymour, 1990). The same authors expressed this idea well: "Judging one's professional worth in intrinsic terms is strong protection against the psychological damage wrought by externally measured forms of self-definition" (p.88). Nurses' need for autonomy and its supports, and a sense of the meaningfulness of the work may be the higher order factor representing their overall affective orientation to their work. Further research is warranted to test this possibility.

The second research question was:

Is there a relationship between motivation, and satisfaction and the intent to leave in the work of nursing?

The present study confirms findings from a meta-analysis on job satisfaction and turnover among nurses (Irvine and Evans, 1995). The work content and work environment had a stronger relationship with satisfaction than economic or individual variables. Administrators have more control over the work variables related to motivation and satisfaction than external or individual factors. From the JCM, general satisfaction, and to a lesser extent, pay and security were related to intent to leave.

The regression analysis of nursing care attributes and intent to leave found that time for patient care, support for autonomy, exchange of information, and complexity of the unit accounted for a small to moderate amount of the variance in intent to leave. An intent to leave a job in nursing appears to be a complex decision, affected by conditions of work that are amenable to change.



Models that describe the process of turnover generally include the worker characteristics, the nature of the job and the organization (Mobley et al., 1979). The results of the study confirmed those of others in which the presence of job characteristics as measured by the JDS were linked to intent to stay in the job. Although the study did not examine worker variables external to the workplace in explaining nurses' intentions of leaving, a study by Rosin and Korabik (1991) found such factors to be relatively unimportant compared to workplace conditions. In a study of nurses who had recently quit their positions, 55% directly reported job dissatisfaction and in the majority of the other cases some disaffection with the job was evident (Lee, Mitchell, Wise, and Fireman, 1996). Further research could explore what happens to nurses who leave their jobs. Do they move to alternative employment within nursing, or to other work either at home or outside nursing?

General satisfaction and intent to leave have been found in this study to be related to the complexity of the patient environment. As the environment becomes less complex, general satisfaction increases and the intent to leave decreases. Although the patient complexity cannot readily be changed, factors that are related to it can be.

Autonomy is related to the provision and exchange of information, and to having enough time for patient care tasks. For example, a system of providing good exchange of information, enough time for patient care tasks, and support for autonomy are within the jurisdiction of a nursing unit, and/or hospital management.

In complex environments, more autonomy in making patient care decisions has been found to be particularly desirable (Lawrence and Dyer, 1983). Contingency theory

asserts that, in complex environments subject to frequent and unpredictable changes, a structure for the delivery of care should incorporate high levels of autonomy and participation in communication (Allred et al., 1995). The nature of the work characteristics influences personal and work outcomes even in complex environments, and is related to the intent to leave.

The third research question was:

Is there a relationship between the attributes of nursing care delivery systems and motivation?

The almost uniform selection of primary nursing/total patient care as the nursing model in use indicates that there is a lack of conceptual clarity with regard to basic terms to define and separate the variations in primary nursing/total patient care. The present study has refuted the assumption that models with similar labels exhibit similar structural dimensions. These findings lend support to those of Allred et al., who found that complex, unpredictable environments increased the need for changes in the attributes of patient care delivery systems, particularly in regard to an increased level of participation in critical information exchange. They recommended that one model may be more compatible with such environmental contingencies than another. The results of this study suggest instead that it may be the attributes of a model that need to be altered.

The nursing care attributes were not related to internal work motivation. In the regression analysis, only feedback from agents (which was added to the nursing attributes from the JCM) contributed a small amount of variance to motivation. However, in the JCM there were also no significant relationship between motivation and any of the core

job characteristics. Thus, the links between motivation and attributes are of a complex nature and not yet fully understood.

The use of the psychological states may be more important in understanding the impact of jobs on employees than previously thought. They may be responsive to other job characteristics besides those in the JCM. In this study the psychological states were correlated with attributes from the nursing care delivery systems as follows: Experienced Meaningfulness correlated significantly with support for autonomy; Experienced Responsibility with time on patient care tasks; and Knowledge of Results with support for autonomy and the exchange of information.

The definition of motivation used by Hackman and Oldham included rewarding and satisfying feelings and self-rewards such as are generated by the psychological states. These feelings and self-rewards are remarkably similar to the concepts of self-efficacy as expressed in Bandura's Expectancy Theory, a process theory of motivation, and self-worth as expressed in another process approach, Equity Theory.

The findings of this study may contribute to an understanding of the elusive concept of the meaning of internal work motivation. The role that feedback, communication, support for autonomy, and time on patient care play in the development of internal psychological states suggests that these variables generate feelings of personal satisfaction and a sense of self-esteem which are related to motivation.

We have seen in the JCM that Internal Work Motivation results from work that leads to experienced meaningfulness, responsibility, and knowledge of results. These three states shed some clarity on motivation. For example, the three psychological states

refer to the extent to which one believes his job to be important in reference to his own value system, the degree of personal accountability for one's work outcomes, and the extent to which one knows how well he is performing on the job.

The preference for support for autonomy and time on patient care strongly points to the nurse-patient relationship as being the essential and central nature of nursing.

Benner (1984 ) was one of the first to document the different stages of the relationship and the tremendous potential for health and healing that emerges within the context of the relationship. In the absence of extrinsic rewards, nurses may derive their self-esteem from factors derived from the core dimensions of the patient-nurse relationship, and their interactions with their co-workers and colleagues.

Renn and Vandenberg (1995) suggested two interpretations about the indirect and direct effects of the core job dimensions on the outcome variables that may help clarify the concept of work motivation. The direct effects of the core job dimensions on outcomes could represent an immediate affective response to a job. By contrast, the indirect effects of the core job dimensions on the job outcomes, which occur through the psychological states, may represent a more thought out and long term assessment of the job (p. 299). Indirect effects would allow feelings of self-satisfaction and self-esteem to be experienced, leading to a sense of work motivation. Other researchers have identified other psychological states that may function as mediators. For example, an individual's high perceived impact on the outcomes of the job would be expected to lead to increased motivation, and be related to competence and self-efficacy which are in turn related to motivation (Bandura, 1977).

The nurses' score on Internal Work Motivation was similar to the other samples. A discipline is characterized and identified by its distinct way of viewing phenomena (Carnevali, 1984), and nursing appears to have developed a unique perspective to its work. Witness the distinction between medicine and nursing in the way each discipline characterizes health. In contrast to Nightingale's (1949,1969) assertion that health is not only to be well but to be able to use well every power we have, medicine defines health as the absence of disease in terms of morbidity and mortality. As Lyon (1983) stated, "It is medicine's definition of health that has pervaded the thinking in nursing and therefore our methods of delivering patient care. When we confuse medicine's definition of health with a nursing-oriented definition of health, we get off track and focus on the diagnosis and treatment of disease "(p. 269). Nowhere is this more evident than in the hospital setting where nurses deliver care. A work place culture that values one definition of health over another will also define the product of the organization differently. Nursing care is influenced by the hospital organization's beliefs about health and the nature of the patient population in addition to nurses' beliefs about health. The intrinsic value of the goal of nursing may override medical and organizational considerations and account in part for a reasonably high level of internal work motivation.

Motivation is affected by individual needs for growth and development at work. Vogt and Murrell (1990), quoted in Zavodsy and Simms (1996), stated that "although humans are intrinsically motivated, much of their self-insight is buried under many layers of external pressures and experiences that block them from discovering their personal life values" (p. 35). Thus, it is possible to speculate on why it is not possible to obtain internal

work motivation directly from the job dimensions themselves, but only as a consequence of the psychological states of the Job Characteristics Model.

Self-motivation, according to Deci and Flaste (1995), rather than external motivation, is at the heart of creativity, responsibility, healthy behaviour, and lasting change. Both the conditions within which people motivate themselves and those that are influenced by job satisfaction are essential to improving the nursing work world. Deci (1995) used a comprehensive body of motivational research to examine the relation between autonomy and motivation. He maintained that providing choice is a central feature in supporting a person's autonomy (p. 35). Meaningful choice engenders willingness and is operationalized as a support for both autonomy and internal motivation. Deci refers to autonomy support as being essential for the sustenance of internal motivation. It requires being able to see the world as other people see it, thus allowing you to understand why they want what they want and why they do as they do. Consequently, internal motivation is associated with richer experience, better conceptual understanding, greater creativity, and improved problem solving.

Across three sources of data analysed in one study, autonomy was not seen as an attribute of success that was sought for its own sake, but rather as an essential element that distinguished the role of nursing (Buscherhof and Seymour, 1990). Support for autonomy is thought to include physical, financial, emotional, social, and organizational components. The importance of support for autonomy then follows directly as a prerequisite to permit autonomy to become real.

Support for autonomy may prove to be an essential feature of the work

environment for nurses who rate the job significance of their work highly. In combination with feedback and the exchange of information, support for autonomy may be the aspect of the work environment that together with the JCM contributes significantly to the work motivation of nurses through a psychological dimension related to self-esteem.

The attributes of nursing care delivery systems contributed to job satisfaction, which is in itself an important contributor to work effectiveness. Job satisfaction has been found to serve an important function in maintaining a stable work environment (Zahra, 1985) and was an important predictor of organizational commitment (Acorn, Ratner, and Crawford, 1997). A study of 908 registered nurses in a variety of nursing work environments found that interpersonal relationships were an important part of job satisfaction (Leppa, 1996) and the relationship between positive care giver interactions and positive patient outcomes continues to be substantiated (Zimmerman, Shortell, Rousseau, et al., 1993).

The importance of communication in nursing has been identified in a large body of previous research that documented its impact on outcomes of survival and patient well-being (Baggs, Ryan, et al., 1992). How groups of professionals communicate is as important as the knowledge each centre of excellence may have (Quinn, Anderson, and Finkelstein, 1996). In this study, the exchange of information was related to Knowledge of Results and General Satisfaction in the JCM, and to time for patient care and support for autonomy from the nursing attributes. It appears that factors related to communication are one of the core job characteristics in nursing that are important to satisfaction. The JCM measures feedback from agents but does not specifically encompass the giving and

receiving of information. Intent to leave is also related to satisfaction with the exchange of information and with general satisfaction.

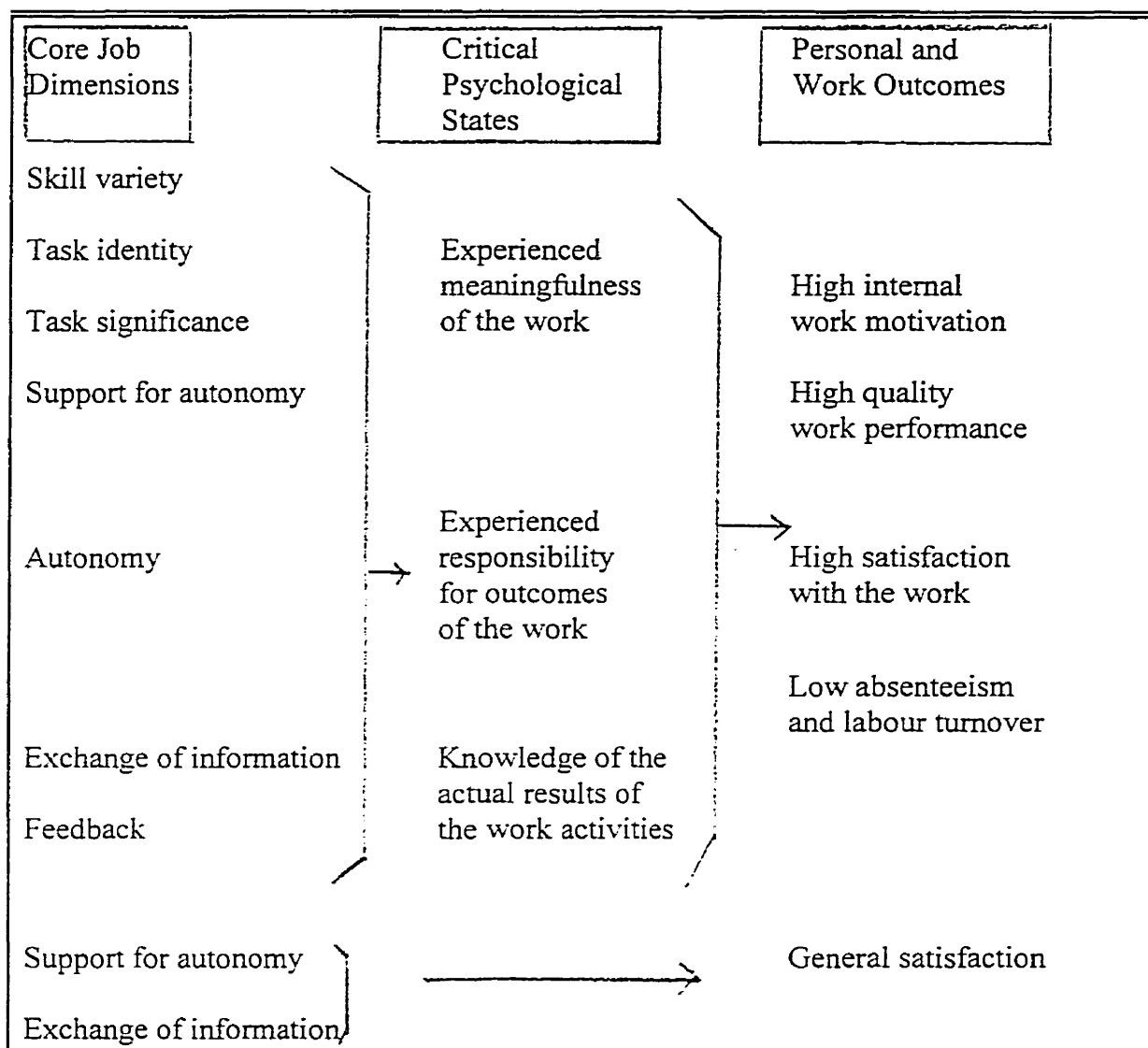


Figure 3. The Job Characteristics Model for Nursing

The fit between the environment and the level of communication and information exchange were significant determinants of cost-effective performance in a study of case



management (Allred et al., 1995). An implication for nursing administration involves increasing the levels of information exchange when patient environments become more complex.

The Job Characteristics Model for hospital based nursing can be modified to include the above delivery system attributes as was shown in Figure 3. Future research is warranted to substantiate and replicate the additions to the model.

To conclude this section, support for autonomy, unit complexity, and satisfactory levels of communication contribute to job satisfaction directly and to motivation indirectly. The proper question concerning motivation, as this study has indicated, is not "How can people motivate others?", but rather "How can people create the conditions within which others will motivate themselves?"

The fourth research question was:

Are there significant differences between the means obtained on the "Intent to Turnover Scale", the JCM, and the demographic variables?

There was no difference in the scores of nurses with or without university preparation in the study. The curricula of diploma and university education vary considerably and it is noteworthy that educational preparation did not account for differences in scores. The influence of the unit and/or hospital culture may override the educational background of the nurses. Inservice education may also contribute to minimizing differences among hospital staff.

Tenure in the job was linked to satisfaction. Nurses with more than 10 years of experience and those who were 50 years of age and older scored significantly higher on general satisfaction, and were less likely to leave their jobs. The nurses with a certain

amount of tenure perhaps have mastered the job while continuing to develop (Johns, Lin Xie, and Fang, 1992). They may have found their individual ways of increasing intrinsic motivation over the years and have come to terms with the fact that their work situation is not ideal. Alternatively, they may have lessened their expectations and been content with their current work environment.

Away from the issue of intent to leave, a study of nurse characteristics and autonomy found a positive relationship between higher levels of nursing education and autonomy (Schutzenhofer and Musser, 1994). The finding of no significant relationship in the present study may be due to other factors; hospital employed nurses are less autonomous than nurses who work in other settings. Specialty areas in the clinical setting have been found to influence autonomy; nurses in psychiatry had significantly higher scores in autonomy than medical surgical nurses (Schutzenhofer and Musser). The years of experience enjoyed by a large proportion of the sample may have conferred similar characteristics to those derived from higher education, particularly in a clinical setting where hands-on knowledge is highly valued. The power and influence of the organization's culture are well-documented (Kramer, 1981), and may diminish the impact of educational differences. It would be helpful to review the curricula of diploma and university programs to ascertain if communication and self-esteem skills and ways of supporting autonomy are included and to what extent. Whether these factors outweigh education is a subject for further research.

## Section II

### Job Redesign

Hackman and Oldham originally designed the JCM to be used as a prelude to redesigning jobs to make them more likely to motivate employees. Some of their specific suggestions are particularly well suited to the work of nursing. The major intended uses of the JDS are to diagnose existing jobs prior to redesign and to evaluate the effects of work redesign. Hackman and Oldham cautioned that jobs should only be redesigned after the diagnosis has been made concerning the problem that is being addressed or, alternatively, what kind of improvements might be achieved (1980, p. 110).

Deming (as cited in Frase and Conley, 1995) developed a generic tool that can be used to apply to many different improvement efforts to establish goals and monitor progress. His intervention consisted of "plan, do, study, and act" (PDSA). The application of the JDS can supply useful data for the plan phase prior to implementing changes.

Since the scores for task identity and feedback, two of the three psychological states, and two of the three outcome scores are relatively low for the nurses in the present study, some planned redesign of the nurses' work is indicated. Incorporating changes to improve information exchange and support for autonomy would also appear appropriate.

The principles for implementing work redesign suggested by Hackman and Oldham (1980) are set out below. Each of the principles is especially powerful in affecting the standing of a job with respect to one or more of the core job characteristics.

1. Combining tasks to increase skill variety and task identity.

Most ways of delivering nursing care currently combine tasks for many aspects of

patient care. The nurses' scores on skill variety and task identity were particularly low. Follow-up phone calls to patients or their families and care givers after discharge from the hospital may allow the nurse to complete a whole and identifiable job, to realize her contribution to the patient, and to increase the variety of nursing skills.

## 2. Forming natural work units.

Natural work units are logical or inherently meaningful groups including the following; geographical, organizational, and customer groups. Nursing relies on a number of natural work units, but modifications are possible to ensure that there continues to be "a logical and meaningful basis that makes good intuitive sense to those who must carry out the work" (Hackman and Oldham, p. 137). The move to ambulatory care holds promise for a recombination of patient groups into geographical or patient needs groups. Other natural work groups for nursing could be focused on the capabilities and skills of the team members.

## 3. Establishing client relationships

Creating client relationships is a three-step process (Hackman and Oldham, p. 139). First, the client must be identified. In nursing there are several categories of clients including the patients, their families, the physician, the work team group, and the public. Second, the most direct contact possible between the worker and the client is established. Third, criteria are set up by which the client can judge the quality of the service provided and relay his judgment back to the worker.

Improved core job dimensions of feedback, skill variety, and autonomy can be realized simultaneously by establishing client relationships. In the past, the term 'client

relationship' has been taken to mean only that of the patient-nurse, while, in reality, the relationship between the nurse and the other groups mentioned above are as vital to the outcomes of patient care and as this study as shown, to motivation and job satisfaction.

#### 4. Vertically loading the job

Responsibility and authority that were formerly reserved for higher levels of workers are given to the workers at their job level. This method has been applied in nursing but not always with the necessary accompaniments such as support for autonomy and information exchange. The organizational adjustments needed to support and permit the realization of such changes is frequently cumbersome and time consuming and not a priority for the institution. Shared governance and Nursing Councils are two approaches currently in practice in Quebec to vertically load the work of nursing.

#### 5. Opening feedback channels.

One of the most effective ways to help employees be aware of how they are doing is to learn about their performance directly from doing the job itself. How to improve job-related feedback varies from job to job, but it may involve simply removing existing blocks (p. 141). The development of informal and formal communication systems among all the participants in the health care team would allow large amounts of information about patients' well-being and outcomes to be shared. The role of management is changing from that of organizing and controlling to that of encouraging, informing, and supporting (Mintzberg, 1990). As it continues in this direction, feedback channels should widen.

### Section III

#### Implications of the Study for Practice and Research

Ways of increasing autonomy and its support have been discussed in this study. For example, autonomy was significantly related to the exchange of information and feedback from the job and from agents. The introduction of mechanisms to increase the two-way flow of information is one feasible approach. Performance appraisals which include contracting to develop professional work goals assist in developing autonomy, and are perceived as supportive. The behaviours of nursing leaders such as promoting employee self-goal setting, self-reward, and staff empowerment, and promoting participation in decision-making are consistent with the JCM (Irvine and Evans, 1995).

A word of caution about autonomy is appropriate here. Nurses have differing aspirations for the profession and it may be counter productive to provide autonomy to those who hold a narrow and non-professional view of nursing. The use of assistance from nurse extenders or nurses' aids in performing non-direct and non-professional care activities has been a noteworthy success when combined with support for autonomy for those nurses who hold high aspirations for the profession, and a failure in the absence of support (Kovner et al., 1993). A common weakness of many redesigned systems for nursing care delivery is inadequate delegation of activities by nurses to lower skilled providers (Conn, Davis, and Occena, 1996). Nurses may be uncomfortable with the autonomy needed to successfully delegate, or fearful of the consequences. They may be uncomfortable with the transition from individual autonomy to the autonomy of the group

where shared managerial skills are the norm. Further, they may be unclear about the nature of the boundaries to their autonomy, and its relationship to responsibility, authority, and accountability (Clifford and Horvath, 1990, p. 33).

The importance of the environment in affecting job characteristics and outcomes challenges the use of standard nursing care delivery systems throughout the hospital. Variations in communication techniques and support for autonomy are required to assure satisfactory levels of job outcomes in different areas of environmental complexity.

From a cost-effectiveness perspective, it is likely that new systems, such as using non-nurses to deliver care, cross training staff, flattening management layers, organizing patient care teams, and relocating services will continue to be put into place in health care settings to achieve cost-effectiveness. From a research perspective, the use of the JCM with the inclusion of factors relevant to the work of nursing is recommended to monitor the impact on the core job characteristics.

The timing of the present research coincided with a period of turmoil and change in the health care system in Montreal and in the rest of Canada. Nursing positions were being closed or modified and a feeling of uncertainty pervaded the majority of nursing units. Such a situation may have altered the responses likely to be found under less stressful conditions. The response rate may have been jeopardized as nurses declined to participate in what they perceived as additional demands on their time. The investigator was strongly advised to collect the data no later than the spring of 1996 since the fear of impending changes to the health care system in Quebec was intensifying anxiety and resentment in the nursing staff which was expected to hinder cooperation with the study.

The findings of the study must be considered with the element of timing in mind.

#### Section IV

##### Conclusion

The study began by focusing on the role of job characteristics on motivation, using the JCM and attributes of nursing care delivery systems. The findings of the study supported the model and found that attributes of nursing care delivery systems also contributed to understanding the links between job characteristics and outcomes.

A modified model of job characteristics for nursing was developed incorporating the attributes of support for autonomy and exchange of information. The support for autonomy factor in this study shares some similarities with Deci's (1995) concept of supportive autonomy where a climate of meaningful choice and understanding allows the individual to act responsibly and creatively. Satisfaction with the amount of time spent on patient care tasks was related to the outcome of general satisfaction, but more significantly, to complexity of the patient environment.

Intent to leave one's position was influenced by factors from the JCM and the nursing attributes used in the study. The JDS did not discriminate between the four hospitals in the study. In retrospect, keeping the individual nursing units within each hospital separate would have perhaps shed more information on the power of the JDS to discriminate. Further research is needed to determine if it can differentiate between nursing units in the same hospital.

Job characteristics rather than personal characteristics or socialization effects influence power in organizations, according to Kanter (1993). With the advent of cost-



cutting in the health care system, support for the work of nursing remains low and yet, nurses who perform the work of patient care in hospitals are best suited to be heard and act from a position of power. Power comes from formal and informal sources and it influences work effectiveness. Nurses identified support, opportunity, and information as important factors for work effectiveness (Laschinger, 1996). In retrospect, the role of work empowerment would have been a useful topic to have included in this study on nurses' motivation.

Further research is required to clarify the concept of work motivation. It remains an elusive concept, but one that is related to job characteristics through the internal psychological states. It appears that the links between self-efficacy, self-esteem, competence, and motivation represent a fruitful area for study.

In conclusion, the findings of the study support the utility of the JCM as a model of work motivation and satisfaction for nurses. The addition of specific attributes of support for autonomy, the exchange of information, and the inclusion of environmental complexity contributed to a fuller understanding of the factors within the work of nursing that are related to motivation and satisfaction. Our understanding of the complex nature of work motivation has been broadened by its possible connection to self-efficacy and self-esteem, factors of significance to the world of work and beyond.

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## APPENDIX A



# McGill

Administration and Policy Studies  
in Education  
McGill University

Postal address  
3724 McTavish Street  
Montreal, PQ, Canada H3A 1Y2

Tel: (514) 398-6746  
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Dear Colleague:

I am doing a study on the work of nurses in medical-surgical units of three McGill teaching hospitals. In this study, which is my doctoral dissertation, I am looking at the relationship between the ways that nursing care is delivered and the characteristics of the work of nursing that are related to work motivation. There is already some research that shows that there is a link between nurses' work motivation, satisfaction and patient outcomes, but more research must be done to strengthen that link. The Division of Nursing has agreed that the study can be distributed.

To this end, I am asking you to complete the questionnaire which is enclosed. Nurses in the medical-surgical units of the hospitals will receive a questionnaire which will take about 30 minutes to complete. It covers the areas of job characteristics, nursing care delivery systems, and brief demographic information. Please return the completed questionnaire to me **within 10 days** by simply replacing it in the envelop on your unit or mailing it via the inter-hospital mail to the address provided. Please use this opportunity to comment from your perspective on how changes to your work are being made, and how they could be made. A summary of your comments will be sent to the Departments of Nursing on your behalf.

Your responses will be kept strictly confidential, and only I will see your individual answers. Your anonymity will be maintained. There are not known to be any risks involved to you. I can not promise you any direct benefits from participating, but this is an opportunity to communicate your thoughts about an important area in nursing.

You are also free not to answer any or all of the questions. To add to the knowledge we need, however, the more nurses who respond to the questionnaire and the more complete the responses, the better.

If you have questions about the study, please feel free to contact me at 340-8222, local 5877. I will be glad to share the results with you at the completion of the study which I hope will be in less than 6 months. I will also at that time tell you which organizations and departments both within and outside of the hospital have received the findings of the study. A summary of the results will be presented to the Departments of Nursing and to the individual units that would prefer an individual presentation.

I am grateful for your taking the time to do this. I know that this time in nursing is full of change and stress. To show my appreciation and my regard for your participation, I will donate \$500.00 to your Department of Nursing to be divided among the units that received questionnaires.

Yours sincerely,

Linda Edgar, N., M.Sc.(A)

**Questionnaire to examine the relationship between the characteristics of the work  
of nursing and nurses' work motivation**

**This questionnaire consists of four parts. Please answer the first 3 parts directly on your questionnaire. A separate answer sheet is provided for Part IV, the Job Diagnostic Survey (JDS).**

**Part I has 11 questions that ask you about the way nursing care is organized on your unit.**

**Part II has 3 questions that ask you about your future plans.**

**Part III has 8 questions about you and your nursing experience.**

**Part IV is the Job Diagnostic Survey (JDS). It was developed as part of a Yale University study of jobs and how people react to them. 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 you no more than 25 minutes to complete this part. 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.**

**Remember to use the answer sheet for Part IV.**

**When you have completed the questionnaire, please return it in the envelope provided within 10 days.**

**Thank you for your cooperation.**

### Part I: Ways of Delivering Nursing Care

PLEASE ANSWER THE FOLLOWING QUESTIONS BY PUTTING A CHECK (✓) IN THE APPROPRIATE BOX(ES)

1.a) Below are 3 general descriptions of nursing care delivery systems. Please select the one that comes closest to describing how you, as an individual, provide care to most of your patients on this unit.

- ☐ 1. Team/functional nursing - a nurse heads a group of other nurses and auxiliary persons and directs them in supplying care to a group of patients. Patients may be cared for by more than one person each shift.
- ☐ 2. Total patient care/primary nursing - a nurse is responsible for all of the care for assigned patients. The nurse may be paired with an assistant but the nurse continues to be responsible for the patient's care. From the patient's perspective, there is one nurse who is responsible for his care each day.
- ☐ 3. Case management/nurse managed care - a nurse is responsible for managing the care for a group of patients following a standardized case management plan developed in collaboration with other professional groups.
- ☐ 4. Other, please describe

1. b) Please select which of the above delivery systems comes closest to describing how nursing care is generally provided on your unit.

- ☐ 1. Team/functional nursing
- ☐ 2. Total patient care/primary nursing
- ☐ 3. Case management/nurse managed care
- ☐ 4. Other, please describe

**THE NEXT FEW QUESTIONS ARE ABOUT THE AMOUNT OF TIME YOU SPEND ON PATIENT AND NON-PATIENT CARE TASKS.**

**2. On a typical day, how much of your work time is spent on patient care?**

- ☐ 1. All of it
- ☐ 2.
- ☐ 3.
- ☐ 4. About half of it
- ☐ 5.
- ☐ 6.
- ☐ 7. None of it

**3. In your opinion, is the amount of time you spend on patient care**

- ☐ 1. Too little
- ☐ 2. About right
- ☐ 3. Too much?

**4. On a typical day, how much of your time is spent on non-patient care?**

- ☐ 1. All of it
- ☐ 2.
- ☐ 3.
- ☐ 4. About half of it
- ☐ 5.
- ☐ 6.
- ☐ 7. None of it



5. In your opinion, is the amount of time you spend on non- patient care.

- ☐ 1. Too little
- ☐ 2. About right
- ☐ 3. Too much?

6. Autonomy is defined as the amount of work-related independence, initiative and freedom in daily work activities. Please think about the amount of autonomy/freedom you have to make decisions about patient care on your unit, and mark the line below with a slash (/).

no  
autonomy

total  
autonomy

7. In your opinion, is the amount of autonomy/freedom you have marked above

- ☐ 1. Too little
- ☐ 2. About right
- ☐ 3. Too much?

8. How satisfied are you in general with the level of support for autonomy available to you on your unit?

- ☐ 1. Completely satisfied
- ☐ 2. Quite satisfied
- ☐ 3. Satisfied
- ☐ 4. Somewhat dissatisfied
- ☐ 5. Very dissatisfied

9. Would you describe the patient population on your nursing unit as being medically or surgically complex and subject to frequent unanticipated events and problems?

- ☐ 1. Usually
- ☐ 2.
- ☐ 3. Sometimes
- ☐ 4.
- ☐ 5. Rarely

Communication has two parts: receiving and giving information in a factual sense, and relationships between people.

10. In general, on your nursing unit, how satisfied are you with receiving and giving information?

- ☐ 1. Completely satisfied
- ☐ 2. Quite satisfied
- ☐ 3. Satisfied
- ☐ 4. Somewhat dissatisfied
- ☐ 5. Very dissatisfied.

11. In general, on your nursing unit, how satisfied are you with interpersonal relationships?

- ☐ 1. Completely satisfied
- ☐ 2. Quite satisfied
- ☐ 3. Satisfied
- ☐ 4. Somewhat dissatisfied
- ☐ 5. Very dissatisfied.

**Part II**

**12. How likely is it that you will actively look for a new job in the next year?**

☐ 1. Not at all likely

☐ 2.

☐ 3.

☐ 4.

☐ 5.

☐ 6.

☐ 7. Extremely likely

**13. Please indicate the degree to which you agree or disagree with the following statement:**

**I often think about quitting.**

☐ 1. Strongly disagree

☐ 2. Disagree

☐ 3. Slightly disagree

☐ 4. Neither agree or disagree

☐ 5. Slightly agree

☐ 6. Agree

☐ 7. Strongly agree

14. Please indicate the degree to which you agree or disagree with the following statement:

I will probably look for a new job in the next year.

- ☐ 1. Strongly disagree
- ☐ 2. Disagree
- ☐ 3. Slightly disagree
- ☐ 4. Neither agree or disagree
- ☐ 5. Slightly agree
- ☐ 6. Agree
- ☐ 7. Strongly agree

**Part III****Demographics**

15. What is your age group?

\_\_\_ 20-29 \_\_\_ 30-39 \_\_\_ 40-49 \_\_\_ 50 and over

16. How long have you been working on this unit?

\_\_\_ less than one year

\_\_\_ between 1 and 2 years

\_\_\_ more than 2 and less than 5 years

\_\_\_ five years or more

17. How many years of nursing experience do you have?

\_\_\_ less than one year

\_\_\_ 1-2 years

\_\_\_ 3-5 years

\_\_\_ 6-10 years

\_\_\_ more than 10 years.

18. Are you working on this nursing unit

\_\_\_ full-time \_\_\_ part-time (excluding availability) \_\_\_ availability?

19. Please describe your primary unit.

a) \_\_\_ medical \_\_\_ surgical \_\_\_ medical/surgical

b) \_\_\_ general care \_\_\_ specialized (specify)

20. Do you also work on other nursing units?

\_\_\_yes \_\_\_no

21. If you answered yes to the above question, do you consider this unit to be your primary unit?

\_\_\_yes \_\_\_no

22. Please indicate your education in nursing

\_\_\_diploma

\_\_\_baccalaureate degree in nursing or other

\_\_\_post-diploma certificate(s)

\_\_\_master's degree in nursing or other

\_\_\_other (please specify)

## Part IV

### The Job Diagnostic Survey (JDS)

Remember to use the answer sheet for this part. Please remove it from this package and use it alongside the questionnaire. Please return the questionnaire with your answers.

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 description as accurate and as objective as you possibly can.

A sample question is given below:

To what extent does your job require that you work with mechanical equipment?

	1	2	3	4	5	6	7	
very little; the job requires almost no contact with mechanical equipment of any kind			moderately					very much:the job requires almost constant work with mechanical equipment

You are to choose 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 choose number 6.

## ANSWER SHEET

1. _____	23. _____	45. _____	67. _____
2. _____	24. _____	46. _____	68. _____
3. _____	25. _____	47. _____	69. _____
4. _____	26. _____	48. _____	70. _____
5. _____	27. _____	49. _____	71. _____
6. _____	28. _____	50. _____	72. _____
7. _____	29. _____	51. _____	73. _____
8. _____	30. _____	52. _____	74. _____
9. _____	31. _____	53. _____	75. _____
10. _____	32. _____	54. _____	76. _____
11. _____	33. _____	55. _____	77. _____
12. _____	34. _____	56. _____	78. _____
13. _____	35. _____	57. _____	79. _____
14. _____	36. _____	58. _____	80. _____
15. _____	37. _____	59. _____	81. _____
16. _____	38. _____	60. _____	82. _____
17. _____	39. _____	61. _____	83. _____
18. _____	40. _____	62. _____	
19. _____	41. _____	63. _____	
20. _____	42. _____	64. _____	
21. _____	43. _____	65. _____	
22. _____	44. _____	66. _____	



## SECTION ONE

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

1	2	3	4	5	6	7
Very little: dealing with other people is not at all necessary in doing my 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 your work?

1	2	3	4	5	6	7
Very little; the job gives me almost no "say" about how and when the work is done			Moderate autonomy; many things are standardized and not under my control but I can make some decisions about the work		Very much; the job gives me almost complete responsibility for deciding how and when the work is done	

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?

1	2	3	4	5	6	7
My job is only a tiny part of the overall piece of work; the results of any activities cannot be seen in the final product			My job is a moderate-sized "chunk" of work; my own contribution can be seen in the final outcome		My job involves doing the whole piece of work, from start to finish, the result of any activities are 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?

1	2	3	4	5	6	7
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?

1	2	3	4	5	6	7
Not very significant; the outcomes of my work is 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 superiors or co-workers let you know how well you are doing your job?

1	2	3	4	5	6	7
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; superiors 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 you are doing - aside from any "feedback" co-workers or supervisors may provide?

1	2	3	4	5	6	7
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:

1	2	3	4	5	6	7
Very inaccurate	Mostly inaccurate	Slightly inaccurate	Uncertain	Slightly accurate	Mostly accurate	Very accurate

- \_\_\_\_\_ 8. The job requires me to use a number of complex or high-level skills.
- \_\_\_\_\_ 9. The job requires a lot of co-operative work with other people.
- \_\_\_\_\_ 10. The job is arranged so that I do not have the chance to do an entire piece of work from beginning to end.
- \_\_\_\_\_ 11. Just doing the work required by the job provides many chances for me to figure out how well I am doing.
- \_\_\_\_\_ 12. The job is quite simple and repetitive.
- \_\_\_\_\_ 13. The job can be done adequately by a person working alone - without talking or checking with other people.
- \_\_\_\_\_ 14. The supervisors and co-workers on this job almost never give me any "feedback" about how well I am doing in my work.
- \_\_\_\_\_ 15. This job is one where a lot of other people can be affected by how well the work gets done.
- \_\_\_\_\_ 16. The job denies me any chance to use my personal initiative or judgement in carrying out the work.
- \_\_\_\_\_ 17. Supervisors often let me know how well they think I am performing the job.
- \_\_\_\_\_ 18. The job provides me the chance to completely finish the pieces of work I begin.
- \_\_\_\_\_ 19. The job itself provides very few clues about whether or not I am performing well.
- \_\_\_\_\_ 20. The job gives me considerable opportunity for independence and freedom in how I do the work.
- \_\_\_\_\_ 21. The job itself is not very significant or important in the broader 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 his or her job. You are to indicate your own personal feelings about your job by 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

- \_\_\_\_\_ 22. It's hard on the job for me to care very much about whether or not the work gets done right.
- \_\_\_\_\_ 23. My opinion of myself goes up when I do this job well.
- \_\_\_\_\_ 24. Generally speaking, I am very satisfied with this job.
- \_\_\_\_\_ 25. Most of the things I have to do on this job seems useless or trivial.
- \_\_\_\_\_ 26. I usually know whether or not my work is satisfactory on this job.
- \_\_\_\_\_ 27. I feel a great sense of personal satisfaction when I do this job well.
- \_\_\_\_\_ 28. The work I do on this job is very meaningful to me.
- \_\_\_\_\_ 29. I feel a very high degree of personal responsibility for the work I do on this job.
- \_\_\_\_\_ 30. I frequently think of quitting this job.
- \_\_\_\_\_ 31. I feel bad and unhappy when I discover that I have performed poorly on this job.
- \_\_\_\_\_ 32. I often have trouble figuring out whether I am doing well or poorly on this job.
- \_\_\_\_\_ 33. I feel I should personally take the credit or blame for the results of my work on this job.
- \_\_\_\_\_ 34. I am generally satisfied with the kind of work I do in this job.
- \_\_\_\_\_ 35. My own feelings generally are not affected much one way or the other by how well I do on this job.
- \_\_\_\_\_ 36. 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

- \_\_\_\_\_ 37. The amount of job security I have.
- \_\_\_\_\_ 38. The amount of pay and fringe benefits I receive.
- \_\_\_\_\_ 39. The amount of personal growth and development I get in doing my job.
- \_\_\_\_\_ 40. The people I talk to and work with on my job.
- \_\_\_\_\_ 41. The degree of respect and fair treatment I receive from my direct supervisor.
- \_\_\_\_\_ 42. The feeling of worthwhile accomplishment I get from doing my job.
- \_\_\_\_\_ 43. The chance to get to know other people while on the job.
- \_\_\_\_\_ 44. The amount of support and guidance I receive from my superior.
- \_\_\_\_\_ 45. The degree to which I am fairly paid for what I contribute to this organization.
- \_\_\_\_\_ 46. The amount of independent thought and action I can exercise in my job.
- \_\_\_\_\_ 47. How secure things look for me in the future in this organization.
- \_\_\_\_\_ 48. The chance to help other people while at work.
- \_\_\_\_\_ 49. The amount of challenge in my job.
- \_\_\_\_\_ 50. The overall 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:

1	2	3	4	5	6	7
Disagree strongly	Disagree slightly	Disagree	Neutral	Agree slightly	Agree	Agree strongly

- \_\_\_\_\_ 51. Most people on this job feel a great sense of personal satisfaction when they do the job well.
- \_\_\_\_\_ 52. Most people on this job are very satisfied with the job.
- \_\_\_\_\_ 53. Most people on this job feel that the work is useless or trivial.
- \_\_\_\_\_ 54. Most people on this job take a great deal of personal responsibility for the work they do.
- \_\_\_\_\_ 55. Most people on this job have a pretty good idea of how well they are performing their work.
- \_\_\_\_\_ 56. Most people on this job find the work very meaningful.
- \_\_\_\_\_ 57. Most people on this job feel that whether or not the job gets done right is clearly their own responsibility.
- \_\_\_\_\_ 58. People on this job often think of quitting.
- \_\_\_\_\_ 59. Most people on this job feel bad or unhappy when they find that they have performed the work poorly.
- \_\_\_\_\_ 60. Most people on this job have trouble figuring out whether they are doing a good or bad job.

## 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	5	6	7	8	9	10
Would like having this only a moderate amount (or less)			Would like having this very much		Would like having this extremely much	

- \_\_\_\_\_ 61. High respect and fair treatment from my supervisor.
- \_\_\_\_\_ 62. Stimulating and challenging work.
- \_\_\_\_\_ 63. Chances to exercise independent thought and action in my job.
- \_\_\_\_\_ 64. Great job security.
- \_\_\_\_\_ 65. Very friendly co-workers
- \_\_\_\_\_ 66. Opportunities to learn new things from my work.
- \_\_\_\_\_ 67. High salary and good fringe benefits.
- \_\_\_\_\_ 68. Opportunities to be creative and imaginative in my work.
- \_\_\_\_\_ 69. Quick promotions.
- \_\_\_\_\_ 70. Opportunities for personal growth and development in my job.
- \_\_\_\_\_ 71. A sense of worthwhile accomplishment 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 about the jobs is the same. Pay attention only to the characteristics actually listed.

Two examples are given below

### JOB A

A job requiring working with mechanical equipment most of the day

1  
Strongly  
prefer A

2  
Slightly  
prefer A

3  
Neutral

### JOB B

A job requiring work with other people most of the day

4  
Slightly  
prefer B

5  
Strongly  
prefer B

If you like working with people and working with equipment equally well, you would choose 3,

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

### JOB A

A job requiring you to expose yourself to considerable danger

1  
Strongly  
prefer A

2  
Slightly  
prefer A

3  
Neutral

### JOB B

A job located 300 km from your home and family

4  
Slightly  
prefer B

5  
Strongly  
prefer B

If you would slightly prefer risking physical danger to working far from home, you would choose 2.

Before continuing, please be sure that you understand exactly how to do these questions and then continue.

72.)

### JOB A

A job where the pay is very good

1  
Strongly  
prefer A

2  
Slightly  
prefer A

3  
Neutral

### JOB B

A job with considerable opportunity to be creative and innovative

4  
Slightly  
prefer B

5  
Strongly  
prefer B



73.)

**JOB A**

A job where you are required to make important decisions

1  
Strongly  
prefer A

2  
Slightly  
prefer A

3  
Neutral

4  
Slightly  
prefer B

5  
Strongly  
prefer B

**JOB B**

A job with many pleasant people to work with

74.)

**JOB A**

A job in which greater responsibility is given to those who do the best work

1  
Strongly  
prefer A

2  
Slightly  
prefer A

3  
Neutral

4  
Slightly  
prefer B

5  
Strongly  
prefer B

**JOB B**

A job in which greater responsibility is given to loyal employees who have the most seniority

75.)

**JOB A**

A job in an organization which is in financial trouble and might have to close down within the year

1  
Strongly  
prefer A

2  
Slightly  
prefer A

3  
Neutral

4  
Slightly  
prefer B

5  
Strongly  
prefer B

**JOB B**

A job in which you are not allowed to have any say whatever in how your work is scheduled, or in the procedures to be used in carrying it out

76.)

**JOB A**

A very routine job

1  
Strongly  
prefer A

2  
Slightly  
prefer A

3  
Neutral

4  
Slightly  
prefer B

5  
Strongly  
prefer B

**JOB B**

A job where your co-workers are not very friendly

77.)

**JOB A**

A job with a supervisor who is often very critical of you and your work in front of other people

1  
Strongly  
prefer A

2  
Slightly  
prefer A

3  
Neutral

**JOB B**

A job which prevents you from using a number of skills that you worked hard to develop

4  
Slightly  
prefer B

5  
Strongly  
prefer B

78.)

**JOB A**

A job with a supervisor who respects you and treats you fairly

1  
Strongly  
prefer A

2  
Slightly  
prefer A

3  
Neutral

**JOB B**

A job which provides constant opportunities for you to learn new and interesting things

4  
Slightly  
prefer B

5  
Strongly  
prefer B

79.)

**JOB A**

A job where there is a real chance you could be laid off

1  
Strongly  
prefer A

2  
Slightly  
prefer A

3  
Neutral

**JOB B**

A job with little chance to do challenging work

4  
Slightly  
prefer B

5  
Strongly  
prefer B

80.)

**JOB A**

A job in which there is a real chance for you to develop new skills and advance in the organization

1  
Strongly  
prefer A

2  
Slightly  
prefer A

3  
Neutral

**JOB B**

A job which provides lots of vacation time and an excellent fringe benefits package

4  
Slightly  
prefer B

5  
Strongly  
prefer B

81.)

**JOB A**

A job with little freedom and independence to do your work in the way you think best

**JOB B**

A job where the working conditions are poor

1  
Strongly  
prefer A

2  
Slightly  
prefer A

3  
Neutral

4  
Slightly  
prefer B

5  
Strongly  
prefer B

82.)

**JOB A**

A job with very satisfying teamwork

**JOB B**

A job which allows you to use your skills and abilities to the fullest extent

1  
Strongly  
prefer A

2  
Slightly  
prefer A

3  
Neutral

4  
Slightly  
prefer B

5  
Strongly  
prefer B

83.)

**JOB A**

A job which offers little or no challenge

**JOB B**

A job which requires you to be completely isolated from co-workers

1  
Strongly  
prefer A

2  
Slightly  
prefer A

3  
Neutral

4  
Slightly  
prefer B

5  
Strongly  
prefer B

*Thank you,  
Walter Edgar*



# McGill

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Chère collègue,

Je fais présentement une recherche sur le travail des infirmières des unités médico- chirurgicales de trois hôpitaux d'enseignement de McGill. Cette recherche, dans le cadre de mon doctorat, porte sur la relation qui existe entre la manière dont les soins infirmiers sont prodigués et sur la motivation qu'éprouvent les infirmières dans leur travail. Des recherches ont déjà démontré qu'un rapport existe entre la motivation et la satisfaction des infirmières face à leur travail, et l'état de santé des patients, mais il faut approfondir ces recherches pour prouver que cette relation existe vraiment. Le Service des Soins Infirmiers de votre hôpital a accordé son appui à cette recherche.

Par conséquent, je vous demanderais de compléter le questionnaire ci-joint. Des infirmières des unités médico-chirurgicales des trois hôpitaux recevront un questionnaire qui devrait prendre 30 minutes à compléter. Il traite de questions sur votre travail, sur la prestation des soins infirmiers, et sur quelques informations d'ordre démographique. Veuillez me retourner le questionnaire **d'ici 10 jours**, en le plaçant dans l'enveloppe prévue à cet effet sur votre unité, ou en l'envoyant à l'adresse indiquée, par le courrier interne. Veuillez profiter de cette occasion pour me transmettre vos commentaires sur la manière dont des changements sont effectués dans votre travail, et aussi de quelle manière vous envisageriez certains changements. Un résumé de vos commentaires sera remis au Service des Soins Infirmiers.

Vos réponses seront strictement confidentielles et je serai la seule à y avoir accès. Votre anonymat sera protégé, et vous ne courez aucun risque. Je ne peux pas vous promettre que votre participation vous apportera des bienfaits directs, mais voici une rare chance pour vous de faire valoir vos idées dans le domaine très important des soins infirmiers. Vous êtes libre de ne pas répondre à certaines questions, ni même d'accepter de compléter ce questionnaire. Pour rendre notre recherche plus valide et pour approfondir nos connaissances, il est toutefois important que le plus grand nombre possible d'infirmières répondent à ce questionnaire.

Si vous avez des questions sur cette recherche, n'hésitez pas à communiquer avec moi au 340-8210, poste 5877. Je me ferai un plaisir de vous faire part des résultats dès que j'aurai terminé, ce que j'espère faire d'ici six mois. Je pourrai également vous dire quels sont les associations et départements des hôpitaux qui recevront les résultats de ma recherche. Un résumé de ces résultats sera présenté aux Services des Soins Infirmiers ainsi qu'aux unités qui en feront la demande.

Je vous remercie du temps que vous accorderez à ce questionnaire. Je sais combien la profession d'infirmière est stressante et subit présentement de grands changements. Pour vous remercier de votre participation, je verserai 500\$ au Service des Soins Infirmiers de votre hôpital, pour être partagés entre les unités qui auront reçu les questionnaires.

Avec toute ma considération.

Linda Edgar, N., M.Sc.(A)

**Questionnaire afin d'examiner le lien entre les caractéristiques associées au travail de l'infirmier-ère et la satisfaction reliée à l'emploi**

Ce questionnaire comprend 4 parties. S'il vous plaît, répondez au 3 premières parties directement sur votre questionnaire. Une feuille additionnelle vous est fournie afin de répondre à la partie IV, l'enquête de diagnostic sur les emplois, *The Job Diagnostic Survey* (JDS).

La partie I comprend 11 questions au sujet de la façon dont les soins infirmiers sont organisés dans votre département.

La partie II comprend 3 questions au sujet de vos plans futurs.

La partie III comprend 6 questions au sujet de votre expérience comme infirmier-ère.

La partie IV est l'enquête de diagnostic sur les emplois. Ce questionnaire a été mis au point dans le cadre d'une étude menée par l'Université Yale sur les emplois et sur les réactions de leurs titulaires.

Les pages suivantes renferment différentes questions concernant votre emploi. Au début de chaque partie du questionnaire, vous trouverez des indications précises sur la façon de répondre aux questions. Lisez-les attentivement.

Nous désirons connaître votre impression sur votre travail et vos réactions à son sujet.

Rappelez-vous d'utiliser la feuille de réponse additionnelle afin de répondre à la partie IV.

Il ne vous faudra normalement pas plus de 30 minutes pour remplir ce questionnaire. Répondez rapidement. Il n'y a aucune question-piège. Vos réponses demeureront confidentielles. Répondez sincèrement.

Quand vous aurez complété le questionnaire, s'il vous plaît, retournez-le dans l'enveloppe ci-joint d'ici 10 jours.

Merci de votre collaboration.

**Partie I****Modèles de Soins Infirmiers**

**VEUILLEZ RÉPONDRE AUX QUESTIONS SUIVANTES EN COCHANT LE (LES) ENDROIT(S) DE VOTRE CHOIX.**

**1A) Voici 3 descriptions générales de modèles de soins infirmiers. Veuillez cocher ce qui décrit le mieux la manière dont vous-même prodiguez des soins à la majorité de vos patients dans cette unité.**

- ☐ 1. Soins d'équipe/soins fonctionnels. Une infirmière est responsable d'un groupe d'infirmières et de bénévoles et les dirige dans les soins qu'ils prodiguent à plusieurs patients. Les patients peuvent être pris en charge par une ou plusieurs personnes durant chaque période de travail.
- ☐ 2. Soins complets du patient/soins primaires. Une infirmière est responsable de tous les soins à prodiguer aux patients qui lui sont assignés. Elle peut s'adjoindre une aide, mais les soins du patient demeurent sa responsabilité. Du point de vue du patient, à chaque jour il a une infirmière qui est responsable de ses soins.
- ☐ 3. Gestion de cas/soins modulaires. Une infirmière est responsable des soins d'un ou de plusieurs patients, selon un plan de gestion de cas standard développé en collaboration avec d'autres professionnels.
- ☐ 4. Autres, prière de décrire.

**1B) Veuillez cocher le modèle de soins qui se rapproche le plus de celui qui est utilisé dans votre unité.**

- ☐ 1. Soins d'équipe/fonctionnels. Une infirmière est responsable d'un groupe d'infirmières et de bénévoles, et les dirige dans les soins qu'ils accordent à plusieurs patients. Les patients peuvent être pris en charge par une ou plusieurs personnes durant chaque période de travail.
- ☐ 2. Soins complets du patient/soins primaires. Une infirmière est responsable de tous les soins à prodiguer aux patients qui lui sont assignés. Elle peut s'adjoindre une aide, mais les soins du patient demeurent sa responsabilité. Du point de vue du patient, à chaque jour il a une infirmière qui est responsable de ses soins.
- ☐ 3. Gestion de cas/soins modulaires. Une infirmière est responsable des soins d'un ou de plusieurs patients, selon un plan de gestion de cas standard développé en collaboration avec d'autres professionnels.
- ☐ 4. Autres, prière de décrire.

**LES QUESTIONS SUIVANTES CONCERNENT LE TEMPS QUE VOUS CONSACREZ AUX TÂCHES RELIÉES DIRECTEMENT ET INDIRECTEMENT AUX SOINS DES PATIENTS.**

2. **Au cours d'une journée normale, combien de temps consacrez-vous aux soins directs des patients?**
- ☐ 1. Tout mon temps
  - ☐ 2.
  - ☐ 3.
  - ☐ 4. Environ la moitié
  - ☐ 5.
  - ☐ 6.
  - ☐ 7. Aucun
3. **A votre avis, le temps que vous consacrez aux soins des patients, est.....**
- ☐ 1. Trop peu
  - ☐ 2. Juste assez
  - ☐ 3. Beaucoup trop
4. **Au cours d'une journée normale, combien de temps consacrez-vous aux tâches indirectement reliées aux soins des patients?**
- ☐ 1. Tout mon temps
  - ☐ 2.
  - ☐ 3.
  - ☐ 4. Environ la moitié
  - ☐ 5.
  - ☐ 6.
  - ☐ 7. Aucun
5. **A votre avis, quel temps consacrez-vous aux tâches indirectement reliées aux soins des patients?**
- ☐ 1. Trop peu
  - ☐ 2. Juste assez
  - ☐ 3. Beaucoup trop
6. **On définit l'autonomie par le degré d'indépendance au travail, à l'initiative et à la liberté d'action dans les activités quotidiennes. Pensez au degré d'autonomie/liberté que vous avez pour décider des soins à prodiguer aux patients dans votre unité, et apposez une marque au bon endroit, sur la ligne suivante.**

pas d'autonomie

entière autonomie

7. A votre avis, le degré d'autonomie/liberté que vous avez indiqué à la question 6, est....
- ☐ 1. Trop peu
  - ☐ 2. Juste assez
  - ☐ 3. Beaucoup trop
8. En ce qui concerne l'autonomie, dans quelle mesure êtes-vous satisfaite du soutien qu'on vous accorde dans votre unité?
- ☐ 1. Entièrement satisfaite
  - ☐ 2. Assez satisfaite
  - ☐ 3. Satisfaite
  - ☐ 4. Un peu insatisfaite
  - ☐ 5. Très insatisfaite
9. Diriez-vous que les patients de votre unité constituent un groupe médicalement ou chirurgicalement complexe et sujet à de fréquents problèmes et événements imprévus?
- ☐ 1. Très
  - ☐ 2.
  - ☐ 3. Parfois
  - ☐ 4.
  - ☐ 5. Rarement

La communication a deux volets : La réception et la transmission de renseignements au sens propre du mot; puis les relations interpersonnelles.

10. En général, dans votre unité, êtes-vous satisfaite des renseignements que vous recevez et que vous donnez?
- ☐ 1. Entièrement satisfaite
  - ☐ 2. Assez satisfaite
  - ☐ 3. Satisfaite
  - ☐ 4. Un peu insatisfaite
  - ☐ 5. Très insatisfaite
11. En général, dans votre unité, êtes-vous satisfaite des relations interpersonnelles?
- ☐ 1. Entièrement satisfaite
  - ☐ 2. Assez satisfaite
  - ☐ 3. Satisfaite
  - ☐ 4. Un peu insatisfaite
  - ☐ 5. Très insatisfaite



**Partie II****Plans d'avenir**

**12. Est-il probable que vous recherchiez activement un nouvel emploi au cours de l'année?**

- ☐ 1. Improbable
- ☐ 2.
- ☐ 3. Un peu probable
- ☐ 4.
- ☐ 5. Probablement
- ☐ 6.
- ☐ 7. Très sûrement

**13. Êtes-vous d'accord ou non avec les énoncés suivants?**

**Je pense souvent à quitter mon emploi.**

- ☐ 1. Absolument pas d'accord
- ☐ 2. Pas d'accord
- ☐ 3. Légèrement pas d'accord
- ☐ 4. Ni d'accord, ni pas d'accord
- ☐ 5. Légèrement d'accord
- ☐ 6. D'accord
- ☐ 7. Entièrement d'accord

**14. Êtes-vous d'accord ou non avec les énoncés suivants?**

**Je serai probablement à la recherche d'un nouvel emploi au cours de l'année.**

- ☐ 1. Absolument pas d'accord
- ☐ 2. Pas d'accord
- ☐ 3. Légèrement pas d'accord
- ☐ 4. Ni d'accord, ni pas d'accord
- ☐ 5. Légèrement d'accord
- ☐ 6. D'accord
- ☐ 7. Entièrement d'accord

## Partie III

## Démographie

15. A quel groupe d'âge appartenez-vous?
- ☐ 20-29      ☐ 30-39      ☐ 40-49      ☐ 50 et +
16. Depuis quand travaillez-vous dans cette unité?
- ☐ moins d'un an  
☐ entre 1 et 2 ans  
☐ plus de 2 ans et moins de 5 ans  
☐ plus de 5 ans
17. Combien d'années d'expérience possédez-vous comme infirmière?
- ☐ moins d'un an  
☐ 1 à 2 ans  
☐ 3 à 5 ans  
☐ 6 à 10 ans  
☐ plus de 10 ans
18. Travaillez-vous dans cette unité?.....
- ☐ à plein temps  
☐ à temps partiel (excluant la disponibilité)  
☐ selon la disponibilité
19. Travaillez-vous également dans d'autres unités de soins infirmiers?
- ☐ oui      ☐ non
20. Si vous avez répondu oui à la question précédente, considérez-vous cette unité comme votre unité principale?
- ☐ oui      ☐ non
21. Veuillez indiquer votre formation d'infirmière.
- ☐ diplôme  
☐ baccalauréat en nursing ou autre  
☐ certificat(s) post-universitaire(s)  
☐ maîtrise en nursing ou autre  
☐ autre (veuillez préciser)

## PARTIE IV

Veillez décrire votre emploi de manière objective.

Cette partie du questionnaire ne vise pas à déterminer si vous aimez ou non votre emploi; des questions à ce sujet vous seront posées plus loin. Efforcez-vous plutôt de donner des réponses aussi exactes et aussi objectives que possible.

Voici un exemple.

A. Devez-vous utiliser des machines pour accomplir votre travail ?

1	2	3	4	5	6	7
Très peu; je n'ai presque jamais besoin de machines pour faire mon travail			Assez souvent		Très souvent; je dois utiliser constamment des machines pour faire mon travail	

Veillez entourer le numéro qui correspond le plus à votre situation.

Si, la plupart du temps, vous devez utiliser des machines pour faire votre travail, mais que ce dernier comporte aussi des écritures, choisissez le numéro 6, comme dans l'exemple précédent.

TOURNEZ LA PAGE ET COMMENCEZ.

## ENQUETE DE DIAGNOSTIQUE SUR LES EMPLOIS

## FEUILLE-REPONSE

1.	_____	26.	_____	51.	_____	76.	_____
2.	_____	27.	_____	52.	_____	77.	_____
3.	_____	28.	_____	53.	_____	78.	_____
4.	_____	29.	_____	54.	_____	79.	_____
5.	_____	30.	_____	55.	_____	80.	_____
6.	_____	31.	_____	56.	_____	81.	_____
7.	_____	32.	_____	57.	_____	82.	_____
8.	_____	33.	_____	58.	_____	83.	_____
9.	_____	34.	_____	59.	_____		
10.	_____	35.	_____	60.	_____		
11.	_____	36.	_____	61.	_____		
12.	_____	37.	_____	62.	_____		
13.	_____	38.	_____	63.	_____		
14.	_____	39.	_____	64.	_____		
15.	_____	40.	_____	65.	_____		
16.	_____	41.	_____	66.	_____		
17.	_____	42.	_____	67.	_____		
18.	_____	43.	_____	68.	_____		
19.	_____	44.	_____	69.	_____		
20.	_____	45.	_____	70.	_____		
21.	_____	46.	_____	71.	_____		
22.	_____	47.	_____	72.	_____		
23.	_____	48.	_____	73.	_____		
24.	_____	49.	_____	74.	_____		
25.	_____	50.	_____	75.	_____		

1. Dans votre travail, êtes-vous appelé(e) à collaborer étroitement avec d'autres personnes (par exemple, des clients ou du personnel de votre propre organisation) ?

1	2	3	4	5	6	7
Très peu; pour faire mon travail il n'est pas nécessaire que je traite avec d'autres personnes			Modérément; une certaine collaboration avec d'autres personnes est nécessaire			Très souvent; il est absolument essentiel que je traite avec d'autres personnes pour faire mon travail

2. Avez-vous une certaine autonomie dans votre travail ? En d'autres termes, pouvez-vous décider seul(e) comment organiser votre travail?

1	2	3	4	5	6	7
Très peu; je ne peux presque rien dire quant à l'organisation de mon travail			Une autonomie moyenne; beaucoup de choses sont normalisées mais je peux prendre quelques décisions			Très souvent; je suis presque entièrement responsable de l'organisation de mon travail

3. Votre travail se présente-t-il comme un tout bien délimité ? Comporte-t-il un début et une fin bien précis ? Ou n'est-ce qu'une petite partie d'une tâche qui doit être achevée par d'autres employés ?

1	2	3	4	5	6	7
Je n'accomplis qu'une infime partie d'un travail; mon apport est imperceptible dans le produit ou le service final			J'accomplis une assez grande part du travail; mon apport est perceptible dans le résultat final			J'accomplis tout le travail du début à la fin; les résultats de mon activité sont facilement perceptibles dans le produit ou le service final

4. Votre travail est-il varié ? En d'autres termes, exécutez-vous des tâches diverses qui font appel à plusieurs de vos aptitudes et à plusieurs de vos talents ?

1	2	3	4	5	6	7
Très peu varié; mon travail est routinier			Moyennement varié			Très varié; mon travail m'oblige à faire des tâches très diverses qui font appel à plusieurs de mes aptitudes et à plusieurs de mes talents

5. Dans l'ensemble, votre travail est-il important ? Autrement dit, votre travail peut-il avoir des répercussions sur la vie et le bien-être d'autres personnes ?

1	2	3	4	5	6	7
Pas très important; les résultats ont peu de chances d'avoir des répercussions sur qui-conque			Assez important			Très important; les résultats de mon travail peuvent avoir de grandes répercussions sur autrui

6. Vos supérieurs et vos collègues vous disent-ils s'ils sont satisfaits de votre travail ?

1	2	3	4	5	6	7
Très rarement; on me parle rarement de la qualité de mon travail			Assez souvent; ils me communiquent parfois leurs réactions, mais pas toujours			Très souvent; mes supérieurs et mes collègues disent presque toujours ce qu'ils pensent de mon travail

7. Votre travail lui-même vous permet-il d'évaluer votre rendement ?  
Autrement dit, outre les réactions de vos supérieurs et de vos collègues, votre travail vous fournit-il des indices sur sa qualité ?

1	2	3	4	5	6	7
Très peu; le travail est organisé de telle sorte qu'il m'est impossible de savoir si je m'acquitte bien de ma tâche			Assez souvent; parfois mon travail me fournit des indices sur sa qualité, mais parfois il ne m'en fournit pas		Beaucoup; le travail est organisé de telle sorte que je sais presque toujours s'il est bien fait	

## DEUXIEME PARTIE

Les énoncés ci-après pourraient servir à qualifier votre emploi.

Veuillez indiquer s'ils sont justes ou faux et s'ils qualifient bien votre emploi.

Essayez d'être objectif(ve), que vous aimiez ou non votre emploi.

Veuillez inscrire un numéro dans le blanc qui précède chaque énoncé, d'après le barème ci-après:

1	2	3	4	5	6	7
Très faux	Faux dans l'ensemble	Assez faux	Sans opinion	Assez juste	Juste dans l'ensemble	Très juste

Dans quelle mesure cet énoncé s'applique-t-il à votre travail ?

- \_\_\_ 8. Mon travail m'oblige à faire preuve de compétences complexes et de haut niveau.
- \_\_\_ 9. Je dois souvent travailler en étroite collaboration avec d'autres personnes.
- \_\_\_ 10. Le travail est organisé de sorte que je n'ai jamais l'occasion de faire une tâche du début à la fin.
- \_\_\_ 11. Le travail, en soi, me donne maintes occasions de déterminer si je m'acquitte bien de ma tâche.
- \_\_\_ 12. Le travail est très simple et répétitif.

- \_\_\_ 13. Le titulaire de l'emploi peut faire adéquatement ce travail seul, sans communiquer ni faire de vérifications avec d'autres personnes.
- \_\_\_ 14. Mes supérieurs et mes collègues ne me disent presque jamais ce qu'ils pensent de mon travail.
- \_\_\_ 15. La qualité de mon travail peut avoir des répercussions sur un grand nombre d'autres personnes.
- \_\_\_ 16. Cet emploi m'empêche de faire preuve d'initiative ou de discernement dans mon travail.
- \_\_\_ 17. Mes supérieurs me tiennent souvent au courant de ce qu'ils pensent de mon travail.
- \_\_\_ 18. Mon emploi me donne la possibilité d'achever les travaux que j'entreprends.
- \_\_\_ 19. Le travail, en soi, ne me donne que peu d'indications sur la façon dont je m'acquitte de ma tâche.
- \_\_\_ 20. Mon emploi me laisse beaucoup d'indépendance et de liberté pour organiser mon travail.
- \_\_\_ 21. Mon emploi n'est pas en soi très important pour l'ensemble de la société.

### TROISIEME PARTIE

Veillez maintenant nous donner votre opinion sur votre emploi.

Les énoncés ci-après pourraient traduire votre opinion sur votre emploi. Veuillez indiquer si vous êtes d'accord avec ceux-ci.

Veillez inscrire un numéro dans le blanc qui précède chaque énoncé, d'après le barème ci-après:

1	2	3	4
Pas d'accord du tout	Pas d'accord	Pas très d'accord	Sans opinion
	5	6	7
	Assez d'accord	D'accord	Tout à fait d'accord

Que pensez-vous des énoncés ci-après ?



- \_\_\_\_\_ 22. Dans cet emploi, j'ai du mal à me soucier vraiment de la façon dont le travail est fait.
- \_\_\_\_\_ 23. Mon estime pour moi-même augmente quand je fais bien mon travail.
- \_\_\_\_\_ 24. De façon générale, je suis très satisfait(e) de mon emploi.
- \_\_\_\_\_ 25. La plupart de mes tâches me semblent inutiles et insignifiantes.
- \_\_\_\_\_ 26. Dans cet emploi, je sais généralement si mon travail est satisfaisant.
- \_\_\_\_\_ 27. Je ressens une grande satisfaction personnelle quand je fais bien mon travail.
- \_\_\_\_\_ 28. Le travail que je fournis dans cet emploi revêt une grande signification pour moi.
- \_\_\_\_\_ 29. J'assume une très grande part de responsabilité pour le travail que j'accomplis.
- \_\_\_\_\_ 30. Je songe souvent à quitter mon emploi.
- \_\_\_\_\_ 31. Dans cet emploi, je suis malheureux(se) quand je découvre que j'ai mal fait mon travail.
- \_\_\_\_\_ 32. Dans cet emploi, j'ai souvent du mal à déterminer si je fais bien ou mal mon travail.
- \_\_\_\_\_ 33. Dans cet emploi, il me semble que je devrais m'attribuer personnellement le mérite ou le blâme suscité par les résultats de mon travail.
- \_\_\_\_\_ 34. Je suis en général satisfait(e) du genre de travail que je fais dans cet emploi.
- \_\_\_\_\_ 35. En général, dans cet emploi, les résultats de mon travail m'importent plus ou moins.
- \_\_\_\_\_ 36. Je suis pleinement responsable de la façon dont le travail est fait.

## QUATRIEME PARTIE

Veillez maintenant exprimer votre degré de satisfaction sur les aspects de votre emploi indiqués ci-après. Nous vous rappelons d'inscrire le numéro correspondant à votre réponse dans le blanc qui précède chaque énoncé.

Etes-vous:

- |                 |           |                 |                           |
|-----------------|-----------|-----------------|---------------------------|
| 1               | 2         | 3               | 4                         |
| Très mécontent  | Mécontent | Assez mécontent | Ni mécontent ni satisfait |
| 5               | 6         | 7               |                           |
| Assez satisfait | Satisfait | Très satisfait  |                           |
- 
- \_\_\_ 37. de votre sécurité d'emploi.
- \_\_\_ 38. de votre salaire et des avantages sociaux que vous recevez.
- \_\_\_ 39. des possibilités de perfectionnement que vous apporte votre travail.
- \_\_\_ 40. de vos contacts personnels et professionnels dans votre emploi.
- \_\_\_ 41. de l'estime que vous témoigne votre supérieur immédiat et de son équité.
- \_\_\_ 42. le cas échéant, d'avoir le sentiment d'accomplir un travail valable.
- \_\_\_ 43. de la possibilité de rencontrer de nouvelles connaissances dans l'exercice de vos fonctions.
- \_\_\_ 44. de l'appui et des conseils que vous donne votre supérieur.
- \_\_\_ 45. de la rémunération pour l'apport que vous faites à l'organisme qui vous emploie.
- \_\_\_ 46. de l'esprit d'initiative et de la liberté d'action que vous avez dans votre travail.
- \_\_\_ 47. de l'avenir qui semble vous être assuré dans cette organisation.

- \_\_\_\_ 48. des possibilités que vous avez d'aider les gens dans l'exercice de vos fonctions.
- \_\_\_\_ 49. des défis que comporte votre travail.
- \_\_\_\_ 50. de la qualité d'ensemble de la direction exercée par vos supérieurs.

## CINQUIEME PARTIE

Songez aux personnes qui ont le meme poste que vous dans votre organisation. Si personne ne fait le meme travail que vous, songez à ceux dont le travail s'apparente le plus au votre.

Lisez attentivement les énoncés ci-après et voyez s'ils représentent bien l'opinion de ces autres personnes à l'égard de ce travail.

Il se peut que les réponses que vous donnerez dans cette partie diffèrent de celles que vous avez données quand vous avez fait part de vos réactions. Il arrive souvent que des personnes différentes aient des vues très divergentes sur un meme travail.

Nous vous rappelons d'inscrire le numéro correspondant à votre réponse dans le blanc qui précède chaque énoncé.

Etes-vous:

1	2	3	4
Pas du tout d'accord	Pas d'accord	Légèrement en désaccord	Ni d'accord ni en désaccord
5	6	7	
Assez d'accord	D'accord	Tout à fait d'accord	

avec les énoncés suivants ?

- \_\_\_\_ 51. La plupart des gens qui font ce travail ressentent une grande satisfaction personnelle lorsqu'ils le font bien.
- \_\_\_\_ 52. La plupart des gens qui font ce travail sont très satisfaits de leur emploi.
- \_\_\_\_ 53. La plupart des gens qui font ce travail croient qu'il est inutile et insignifiant.

- \_\_\_\_\_ 54. La plupart des gens qui font ce travail se sentent personnellement responsables pour le travail qu'ils accomplissent.
- \_\_\_\_\_ 55. La plupart des gens qui ont cet emploi ont une assez bonne idée de la qualité de leur travail.
- \_\_\_\_\_ 56. La plupart des gens qui font ce travail trouvent qu'il revet une grande signification pour eux.
- \_\_\_\_\_ 57. La plupart des gens qui font ce travail se sentent pleinement responsables de la façon dont le travail est fait.
- \_\_\_\_\_ 58. Les gens qui font ce travail songent souvent à quitter leur emploi.
- \_\_\_\_\_ 59. La plupart des gens qui ont cet emploi sont malheureux quand ils découvrent qu'ils ont mal travaillé.
- \_\_\_\_\_ 60. La plupart des gens qui font ce travail ont du mal à savoir s'ils le font bien ou mal.

#### SIXIEME PARTIE

Vous trouverez ci-dessous des traits caractéristiques qui pourraient se retrouver dans tout emploi. Tout le monde ne les considère pas souhaitables au même degré.

Nous aimerions connaître le degré d'importance que vous accordez personnellement à chacune de ces caractéristiques dans votre emploi.

Veuillez indiquer à l'aide du barème ci-après, dans quelle mesure vous aimeriez que ces caractéristiques fassent partie de votre emploi.

ATTENTION: La numérotation diffère des précédentes.

- | 4                       | 5   | 6 | 7 | 8 | 9          | 10 |
|-------------------------|---|---|---|---|------------|----|
| Moyennement<br>(ou peu) | Beaucoup  |   |   |   | Enormément |    |
| _____ 61.               | Etre tenu(e) en haute estime et traité(e) avec équité par vos supérieurs. |   |   |   |            |    |
| _____ 62.               | Avoir un travail stimulant et comportant des défis.                       |   |   |   |            |    |
| _____ 63.               | Avoir des occasions de faire preuve d'initiatives et d'agir librement.    |   |   |   |            |    |
| _____ 64.               | Avoir une grande sécurité d'emploi.                                       |   |   |   |            |    |

- \_\_\_ 65. Avoir des collègues amicaux.
- \_\_\_ 66. Avoir l'occasion d'apprendre de nouvelles choses de votre travail.
- \_\_\_ 67. Avoir un salaire élevé et de nombreux avantages sociaux.
- \_\_\_ 68. Avoir des occasions de faire preuve d'imagination et de créativité dans votre travail.
- \_\_\_ 69. Avoir des promotions rapides.
- \_\_\_ 70. Avoir des possibilités de croissance personnelle dans votre travail.
- \_\_\_ 71. Avoir le sentiment d'accomplir un travail valable.

#### SEPTIEME PARTIE

Les individus ne sont pas tous du meme avis quant au type d'emploi qu'ils aimeraient le plus obtenir. Les questions contenues dans cette partie vous permettront d'indiquer ce qui est le plus important pour vous dans un emploi.

Pour chaque question deux postes différents sont brièvement décrits. Veuillez indiquer celui d'entre eux que vous préféreriez si vous deviez choisir.

Lorsque vous répondrez, supposez que les deux poste sont identiques. Ne vous attardez qu'aux caractéristiques indiquées.

Voici deux exemples.

POSTE A			POSTE B	
Emploi exigeant de travailler avec des machines pendant la plus grande partie de la journée.			Emploi exigeant de travailler avec d'autres personnes pendant la plus grande partie de la journée.	
1	2	3	4	5
Préférence marquée pour le poste A	Légère préférence pour le poste A	Sans préférence	Légère préférence pour le poste B	Préférence marquée pour le poste B

Si vous aimez autant travailler avec d'autres personnes qu'avec des machines, vous devez entourer le numéro 3,

Voici un autre exemple. Le choix sera plus difficile à faire car il s'agit de deux postes qui comportent tous les deux des aspects désagréables.

POSTE A			POSTE B	
Emploi exigeant que vous vous exposiez à de grands dangers			Travail situé à 300 Km de votre foyer	
1	2	3	4	5
Préférence marquée pour le poste A	Légère préférence pour le poste A	Sans préférence	Légère préférence pour le poste B	Préférence marquée pour le poste B

Si vous aviez une légère préférence pour un poste qui comporte des dangers comparativement à un poste éloigné de votre foyer, vous entoureriez le numéro 2.

Allez-y maintenant en encerclant le chiffre qui indique votre préférence

POSTE A			POSTE B	
72. Un poste très bien rémunéré			Un poste offrant souvent l'occasion de se montrer créateur et novateur	
1	2	3	4	5
Préférence marquée pour le poste A	Légère préférence pour le poste A	Sans préférence	Légère préférence pour le poste B	Préférence marquée pour le poste B

POSTE A			POSTE B	
73. Un poste où vous devez prendre d'importantes décisions			Un poste qui vous permet de travailler avec beaucoup de gens très agréables	
1	2	3	4	5
Préférence marquée pour le poste A	Légère préférence pour le poste A	Sans préférence	Légère préférence pour le poste B	Préférence marquée pour le poste B

## POSTE A

74. Un poste où l'on confierait les plus grandes responsabilités à ceux qui font le meilleur travail

1	2	3
Préférence marquée pour le poste A	Légère préférence pour le poste A	Sans préférence

## POSTE B

Un poste où l'on confierait les plus grandes responsabilités aux employés loyaux qui ont le plus d'ancienneté

4	5
Légère préférence pour le poste B	Préférence marquée pour le poste B

## POSTE A

75. Un poste dans une entreprise éprouvant des difficultés financières, qui risquerait de fermer ses portes pendant l'année

1	2	3
Préférence marquée pour le poste A	Légère préférence pour le poste A	Sans préférence

## POSTE B

Un poste où vous ne pourriez rien dire quant à vos horaires ni quant à l'organisation de votre travail

4	5
Légère préférence pour le poste B	Préférence marquée pour le poste B

## POSTE A

76. Un poste très routinier

1	2	3
Préférence marquée pour le poste A	Légère préférence pour le poste A	Sans préférence

## POSTE B

Un poste où vos collègues ne seraient pas très aimables

4	5
Légère préférence pour le poste B	Préférence marquée pour le poste B

## POSTE A

77. Un poste où un supérieur se montre souvent très critique envers vous et votre travail en présence d'autres personnes

1	2	3
Préférence marquée pour le poste A	Légère préférence pour le poste A	Sans préférence

## POSTE B

Un poste qui ne vous permet pas d'utiliser des compétences que vous avez acquises au prix d'un dur labeur

4	5
Légère préférence pour le poste B	Préférence marquée pour le poste B

## POSTE A

78. Un poste où votre supérieur vous estime et vous traite de façon juste

1	2	3
Préférence marquée pour le poste A	Légère préférence pour le poste A	Sans préférence

## POSTE B

Un poste qui vous donne sans cesse l'opportunité d'apprendre des choses nouvelles et intéressantes

4	5
Légère préférence pour le poste B	Préférence marquée pour le poste B

## POSTE A

79. Un poste où vous risquez vraiment d'être congédié

1	2	3
Préférence marquée pour le poste A	Légère préférence pour le poste A	Sans préférence

## POSTE B

Un poste qui comporte très peu de défis

4	5
Légère préférence pour le poste B	Préférence marquée pour le poste B



## POSTE A

80. Un poste qui offre de réelles possibilités d'acquérir de nouvelles compétences et de monter dans la hiérarchie de l'organisation

1	2	3
Préférence marquée pour le poste A	Légère préférence pour le poste A	Sans préférence

## POSTE A

81. Un poste où l'on ne vous laisserait que peu de liberté et de latitude pour organiser votre travail à votre guise

1	2	3
Préférence marquée pour le poste A	Légère préférence pour le poste A	Sans préférence

## POSTE A

82. Un poste où se fait un très bon travail d'équipe

1	2	3
Préférence marquée pour le poste A	Légère préférence pour le poste A	Sans préférence

## POSTE B

- Un poste assorti de nombreux congés et avantages sociaux

4	5
Légère préférence pour le poste B	Préférence marquée pour le poste B

## POSTE B

- Un poste dans lequel les conditions de travail sont mauvaises

4	5
Légère préférence pour le poste B	Préférence marquée pour le poste B

## POSTE B

- Un poste qui vous permet d'utiliser vos compétences et vos capacités au maximum

4	5
Légère préférence pour le poste B	Préférence marquée pour le poste B

## POSTE A

83. Un poste qui dans le meilleur des cas ne pose que peu de défis

1

Préférence  
marquée  
pour le  
poste A

2

Légère  
préférence  
pour le  
poste A

3

Sans  
préférence

## POSTE B

Un poste où vous devez travailler isolé de vos collègues

4

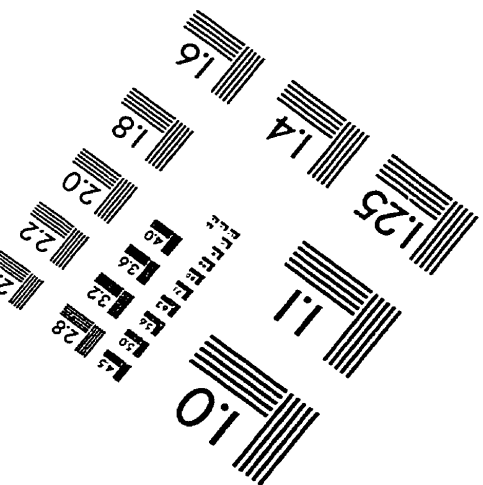
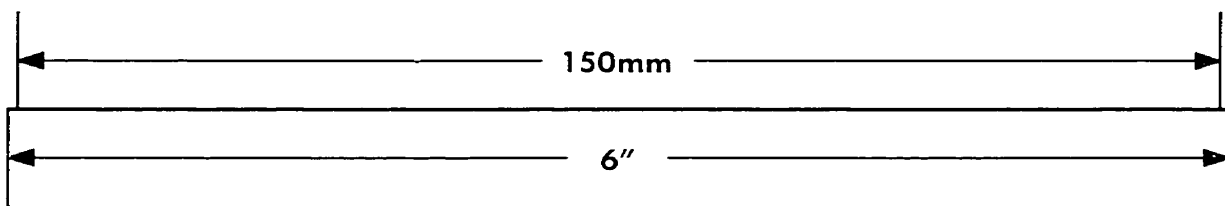
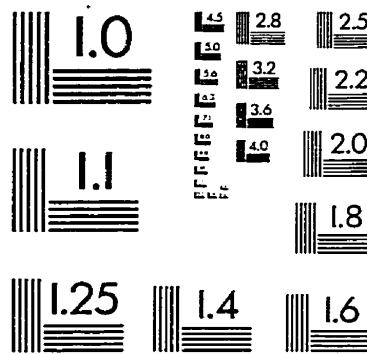
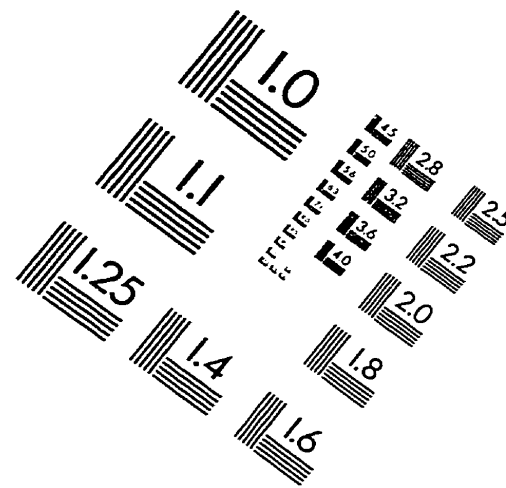
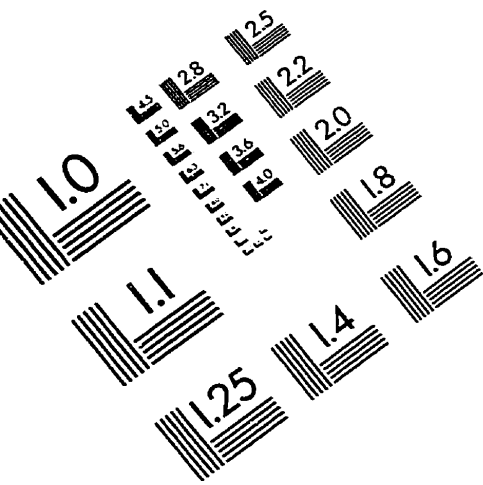
Légère  
préférence  
pour le  
poste B

5

Préférence  
marquée  
pour le  
poste B

*merci beaucoup  
Nina Edson*

# IMAGE EVALUATION TEST TARGET (QA-3)



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