NURSES' PERCEPTIONS OF THE IMPACT OF HEALTH CARE REFORMS, PSYCHOLOGICAL CONTRACT VIOLATION, RESTRUCTURING AND GENERAL JOB SATISFACTION, ORGANIZATION COMMITMENT, AND INTENT TO STAY

DAWN O. CHUBBS

Nurses' Perceptions of the Impact of Health Care Reforms, Psychological Contract Violation, Restructuring and General Job Satisfaction, Organization Commitment, and Intent to Stay

by

Dawn O. Chubbs

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Abstract

A descriptive, correlational design was used to explore nurses' perceptions of the impact of health care reforms and work-related attitudes and behavioural intentions four years following the implementation of major restructuring initiatives in the province of Newfoundland and Labrador. The relationships between and among key study variables (i.e., personal characteristics, perceived impact of health care reforms, work-related attitudes, and behavioural intentions) were also examined. A modified version of the integrated causal model, The Conceptual Model of Behavioural Intentions (CMBI), constituted the basic framework for this research study.

The study sample consisted of 181 registered nurses employed in direct care, administration, and/or education from all health care regions of the province of Newfoundland and Labrador from 1995 to 1999. Data were collected over a five-week period, from June to July 1999, using a mailed-out questionnaire.

Study findings indicated that nurses were generally more negative than positive about the impact of health care reforms. In comparison to baseline data collected prior to managerial restructuring and downsizing (i.e., in 1995), there was a significant worsening of nurses' attitudes toward the impact of reforms. Respondents were most negative about quality of care, emotional climate, and standards of care. Study findings also demonstrated that respondents were

neither totally satisfied nor dissatisfied with most aspects of restructuring, had a slightly low or neutral level of commitment to their organizations, felt that implied psychological contracts with the organization had been violated, and were uncertain about whether they would stay with their current employer.

Partial support for the major assumptions of the CMBI was provided through the study findings. All of the reform variables (i.e., importance of reforms, emotional climate, practice-related issues, quality of care, safety concerns, and standards of care) were significantly and positively related to the intervening attitudes (i.e., psychological contract violation, restructuring satisfaction, job satisfaction, and organizational commitment) and behavioural intentions (i.e., intent to stay). As well, all of the intervening attitudes depicted moderate to strong, positive correlations with each other and with behavioural intentions. While none of the personal characteristics influenced the intervening attitudes, geographic region of workplace and level of education were found to influence behavioural intentions.

Study findings failed to support the causal, linear process proposed by the CMBI, where organizational commitment is represented as a key predictor of behavioural intentions. Regression analysis supported general job satisfaction as the key predictor of behavioural intentions. Further, the work-related variable of standards of care emerged as a better predictor of behavioural intentions than intervening variables (i.e., restructuring satisfaction and organizational

commitment). These two variables combined to explain 28% of the variance in behavioural intentions (i.e., intent to stay).

The findings of this study suggest that nurses working within the Newfoundland and Labrador health care system four years after the implementation of major health care reforms are experiencing high levels of dissatisfaction and frustration with conditions in their work environment. While these findings support the work of previous researchers, the generalizability of results to other nursing populations is limited. Further research is needed to explore how other factors in the changing work environment are impacting nurses' work-related attitudes and behavioural intentions.

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CHAPTER 1

Introduction

The implementation of health care reform measures within health care delivery organizations is in response to a national commitment to control costs and increase accountability for the state of health care of all Canadians. Governments have initiated system-wide reform to change the way publicly funded health care is managed and delivered. This has resulted in the implementation of major reform initiatives, including restructuring, regionalization, downsizing, and re-engineering, in health care organizations throughout every province and territory in the country (Church & Barker, 1998; Decter, 1997; Lemieux-Charles, Leatt, & Aird, 1994; Shamian & Lightstone, 1997). While the intent is to contain costs, integrate and coordinate services, and empower regions, these reforms have precipitated many changes throughout health care organizations, the impact of which has been felt at many levels, but most especially by key health care providers (Laschinger, Sabiston, Finegan, & Shamian, 2001).

Regionalization, one of the most prevalent strategies in Canada in the 1990s, transferred the responsibility and accountability for allocation of health care resources and service planning from provincial government departments to regional health care boards (Decter, 1997; Jackson, 1995; Vail, 1995). At the same time, a government-driven mandate required regional boards to

consolidate existing locally-based community and institutional boards under one umbrella, and also forge diverse affiliations among hospitals and other institutions. With this approach to health care delivery, community participation and identification of population-specific health needs are integral to decision-making (Decter; Vail). Early research findings suggest that the authority of regional boards varies across provincial jurisdictions, and has not achieved projected benefits, especially cost reductions and improved services (Church & Barker, 1998; Lomas, Woods, & Veenstra, 1997a; Markham & Lomas, 1995). Further, there is some evidence to suggest that nurses working in community and acute care settings are concerned about the emotional climate of the workplace, practice-related issues, safety issues, standards of care, and quality of care (Reutter & Ford, 1998; Shindul-Rothschild, Berry, & Long-Middleton, 1996; Way, 1995). However, little attention has been given to the impact of reform initiatives on work-related attitudes (i.e., psychological contract violation, restructuring and general job satisfaction, and organizational commitment) and behavioural intentions (i.e., intent to stay).

In additional to regionalization, Canadian hospitals have been subjected to other types of reform, including downsizing, re-engineering, and restructuring. As a result of radical redesign initiatives, there have been multiple effects throughout health care settings. A marked reduction in service duplication and staff (i.e., managers/supervisors) has led to changed roles and responsibilities

and increased job insecurity, demands and stress for nurses in acute care settings (Baumgart, 1997; Leatt, Baker, Halverson, & Aird, 1997). Similarly, in the community health sector, an increase demand in service requirements (i.e., in the area of home care) and the elimination of specific health programs, as a result of a paradigm shift to a population health model, have resulted in new and challenging role expectations for community health nurses (Chalmers, 1995; Leatt et al.; Shamian & Lightstone, 1997).

The current research study was the first stage of a longitudinal study designed by Parfrey and colleagues[1] to examine the impact of health care reform on institutions and providers in the province of Newfoundland and Labrador. The mandate of the larger project is to monitor reform impact in several areas (i.e., efficiency, costs, acute care bed utilization, quality of care, employee attitudes, and patient satisfaction). The current study focussed on one aspect of the employee attitudes component of the larger study. The focus of this study was to explore registered nurses' (RNs) perceptions of the impact of health care reforms in all clinical settings. A second purpose was to assess nurses' work-related attitudes (i.e., psychological contract violation, restructuring and general

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[1] Department of Health & Community Services, Government of Newfoundland and Labrador, Health Care Corporation of St. John's, and the Canadian Health Services Research Foundation jointly funded the project, *The Impact of Restructuring in Acute Care Hospitals in Newfoundland and Labrador*, by Parfrey et al. (1999).

job satisfaction, and organizational commitment) and behavioural intentions (i.e., intent to stay).

Background and Rationale

A substantial amount of empirical data supports the linkage between organizational processes and employee attitudes (e.g., job satisfaction, organizational commitments, etc.) and behavioural intentions (i.e., intent to stay or leave) (Alexander, Lichtenstein, Oh, & Ullman, 1998; Mobley, Griffeth, Hand & Meglino, 1979; Mueller & Price, 1990; Price & Mueller, 1981). Of late, a growing interest has been demonstrated in the effects of change in job-related and work environment factors on perceived violation in psychological contracts (Robinson & Rousseau, 1994; Turnley & Feldman, 1998, 1999). Research findings also suggest that contract violation may negatively affect employees' attitudes (e.g., diminish trust and loyalty, decrease job and organizational satisfaction, etc.) and behaviours (e.g., intent to stay, turnover, etc.) (Robinson & Rousseau; Robinson, Kraatz, & Rousseau, 1994).

Research efforts have also been focussed on the impact of health care reform on employee job satisfaction, organizational commitment, and intent to stay or leave (e.g., Armstrong-Stassen, Cameron, & Horsburgh, 1996; Brown et al., 1999; Burke & Greenglass, 2001; Ingersoll, Kirsch, Merk, & Lightfoot, 2000; Keddy, Gregor, Foster, & Denney, 1999; Pyne, 1998; Shindul-Rothschild et al.,

1996; Woodward, Shannon, Lendrum, Brown, McIntosh, & Cunningham, 2000, etc.). It has been suggested that reforms have significantly altered the nature of employee commitment and the factors influencing it (Meyer, Allen, & Topolnytsky, 1998). Although no studies were identified that examined the impact of health reform on perceived psychological contract violation, Turnley and Feldman (1998) found that employees subjected to major restructuring were significantly more likely to believe that violations had occurred than their counterparts working in more stable firms.

Nurses, as the largest group of health professionals in Canada, have been profoundly affected by health reform. Studies have demonstrated that changes in the health care system are having an impact not only on how health care is being delivered, but also on nurses' job expectations, values, beliefs, and behaviours (Armstrong-Stassen et al., 1996; Blythe, Baumann, & Giovannetti, 2001; Burke & Greenglass, 2001; Laschinger, Finegan, Shamian, & Casier, 2000). Nurses across various practice settings have reported multiple negative effects, including decreased job security, decreased morale, increased stress and frustration, and decreased satisfaction (Baumann et al., 1996, 2001; Laschinger et al., 2001; Reutter & Ford, 1998; Way, 1995), and expansions in role expectations and responsibilities (Acorn & Crawford, 1996; Ingersoll, Cook, Fogel, Applegate, & Frank, 1999). Other studies have identified positive outcomes of health care reform, such as new and challenging roles, more staff

and client involvement in decision-making, better interdisciplinary approaches to care, and greater staff empowerment (Reutter & Ford; Way).

Despite some inconsistencies between studies, findings generally suggest that multiple factors (i.e., job-related, work environment, and personal characteristics) exert separate and interactive effects on provider outcomes. Meta-analyses of studies conducted with nurses working in acute care settings provide evidence for the much stronger influence of job-related and work environment factors on job satisfaction than economic or psychological/ individual factors (Blegen, 1993; Irvine & Evans, 1995).

Problem Statement

Like many other provinces in Canada, Newfoundland and Labrador has been challenged to provide consistent, comprehensive health care in a fiscally responsible manner. In the 1980s and 1990s, faced with a weak economy and decreased federal transfer payments, a government-appointed Royal Commission reviewed the costs of operating the province's hospitals and nursing homes. Over 200 recommendations for changes were made to rationalize health care spending, which formed the foundation of and expedited health care restructuring in Newfoundland and Labrador (Newfoundland and Labrador Department of Health, 1994).

Guided by principles for funding reduction and changing health care needs, the provincial government mandated reforms which significantly changed the composition and mode of service delivery (Davis & Tilley, 1996). With an identified goal to better address the determinants of health and access to services, the government moved towards enhancing community services and placing greater emphasis on the acquisition of health care services outside the traditional hospital setting (Newfoundland and Labrador Department of Health, 1994). To accomplish this, regionalization of health care services, the first level of health reform, began in 1994. Regionalization involves the integration of various health sector boards as well as the devolution of power and authority from provincial departments of health to the regional level (Decter, 1997). By 1998, three main types of regional health care boards had been created: six institutional boards (i.e., consisting of hospital, long-term care, and rehabilitation facilities), four regional community boards (i.e., including public health, home care, and community-based services), and two integrated boards that combined institutional and community boards (Davis, 1998/1999). In addition, within the St. John's region, two boards (i.e., St. John's Nursing Home Board and the Newfoundland and Labrador Cancer Treatment and Research Foundation) remained separate from both the institutional and community boards. This restructuring of services significantly reduced the number of health boards across the province from forty to fourteen in a two-year period.

At the institutional level, services were significantly being restructured (i.e., through downsizing, re-engineering, and mergers). In 1995, in the St. John's area, eight tertiary and secondary care institutions were consolidated under the authority of the Health Care Corporation of St. John's (HCCSJ). Additional downsizing occurred with hospital closures, consolidation of administrative and support services, and the integration of hospital services into multi-disciplinary programs (Davis, 1998/1999). While the intent of regionalization was to reduce costs and empower regions, these measures have precipitated a myriad of change within organizations and their employees, including nurses (Davis & Thorburn,1999).

Although large-scale health care reform initiatives in Newfoundland and Labrador are in its sixth year, a limited number of studies have been conducted that examined nurses' work-related attitudes before, during, or after the implementation of health care reforms. In 1994, prior to major downsizing initiatives in Newfoundland and Labrador, the Association of Registered Nurses of Newfoundland and Labrador (ARNNL) conducted a qualitative survey of nurses' perceptions of the impact of health care reforms. Following an analysis of survey responses, Way (1994) reported that most respondents viewed anticipated system changes (i.e., staff reductions, overwhelming workload demands, and increased role responsibilities) in a negative light. Further, these

changes were also viewed as having potential negative repercussions for job satisfaction, quality of patient care, and professional practice.

The ARNNL conducted a subsequent survey, using a stratified random sample of nurses (N = 333), to gather baseline data on nurses' perceptions of the impact of health care reform. This survey was conducted during regionalization but prior to managerial restructuring and downsizing initiatives. Way (1995) reported that respondents were neither totally positive nor negative about the overall impact of health care reform. Significantly, the areas receiving the most negative ratings included quality of care, the emotional climate of the workplace, and standards of care.

Pyne (1998) measured nurses' perception of the impact of health care reform and levels of job satisfaction in acute care settings of the HCCSJ six months into re-engineering (i.e., implementation of a program-based management and professional practice model). The results indicated that nurses were slightly dissatisfied with their jobs, were more negative than positive about the overall impact of health care reform, and were most negative about quality of care, emotional climate of the workplace, and standards of care.

While reforms are intended to improve the overall health care system, it has been suggested that there were more drawbacks than benefits in the early years of reform (Davis, 1998/1999; Lomas, Woods, & Veenstra, 1997a). The challenge for many nurses is to continue to provide quality care while trying to

deal with the stress and uncertainty of a work environment undergoing extensive reform. While there is a growing research base on factors influencing nurses' job satisfaction, there are limited research studies exploring the impact of health care reform on other important work-related attitudes (e.g., occupation and professional satisfaction, organizational commitment, psychological contract violations, etc.) and behavioural intentions (e.g., intent to stay, intent to search, turnover, etc.). The present study was designed to explore nurses' perceptions of the impact of reform and their work-related attitudes and behavioural intentions within the proposed Conceptual Model of Behavioral Intentions (CMBI).

The CMBI is based on the integrated causal model of nurse turnover behaviours (Mueller & Price, 1990; Price & Mueller, 1986) and the consequences of psychological contract violation (Turnley & Feldman, 1998, 1999). The CMBI identifies several factors which influence behavioural intentions (i.e., intent to stay). These factors include determinants (i.e., impact of health care reforms, or job-related and work environment factors), covariates (i.e., intervening attitudinal states which include psychological contract violation, restructuring satisfaction, job satisfaction, and organizational commitment), and correlates (i.e., select personal characteristics and staffing issues). The covariates also constitute the intermediate outcomes which exert a direct and indirect effect on each other, and

are also influenced by determinants and correlates. The proposed relationships among study variables are outlined in the research questions.

The need and importance of further and continued research in this area is critical to better understand and monitor how nurses are responding to changes brought about through health care reform initiatives over time. This research study will extend the current body of research by comparing nurses' perceptions of reform over time and examining the impact of these reforms on perceived psychological contracts, job satisfaction, organizational commitment, and intent to stay.

Purpose and Research Questions

The primary purpose of the study was to examine nurses' perceptions of the impact of health care reforms in Newfoundland and Labrador in 1999 and to compare these data with previous data gathered on the same sample by Way (1995). A second purpose was to investigate: 1) how satisfied nurses were with their jobs and restructuring efforts, 2) how committed they were to their organizations, and 3) their intentions of remaining with current employers. A third purpose was to investigate which factors were the best predictors of intermediate outcomes and behavioural intentions

The study was designed to answer the following research questions:

1. How do RNs working in diverse clinical settings currently perceive the impact of health care reform (i.e., importance of reforms, emotional climate, practice-related issues, quality of care, safety concerns, and standards of care)?
2. Is there a significant change in nurses' perceptions of the overall impact of reform four years following regional restructuring of the health care system?
3. What are nurses' levels of psychological contract violation, restructuring satisfaction, general job satisfaction, organizational commitment, and behavioural intentions (i.e., intent to stay)?
4. Are the impact of health care reform variables significantly related to intermediate outcomes (i.e., psychological contract violation, restructuring satisfaction, job satisfaction, and organizational commitment) and behavioural intentions?
5. Are intermediate outcomes significantly related to each other and behavioural intentions?
6. Are perceptions of the impact of health care reforms, intermediate outcomes, and behavioural intentions a function of key personal characteristics (i.e., age, gender, education, region of employment, primary area of responsibility, current position, nursing experience, current position tenure, and employment status)?

7. What factors investigated in the current study are the best predictors of intermediate outcomes and behavioural intentions?

Summary

Nurses in the province of Newfoundland and Labrador have been subjected to extensive restructuring efforts in the health care system. The resulting changes have been complex and have challenged both nursing practice and tradition. However, few studies have been completed in the province to monitor the effects of health care reforms on nurses' attitudes and behaviours over time. This research study aims to explore nurses' perceptions of health care reforms in 1999 and compare this information with data collected in 1995.

CHAPTER 2

Literature Review

To gain a more thorough understanding of the impact of health care reform on nurses, it is essential to examine those factors thought to influence key work-related attitudes and behavioural intentions. The literature review consists of three sections. The first section presents a review of health care reform and its implications for the general nursing population. The second section presents research findings on key predictors of intermediate outcomes (i.e., psychological contract violation, general job satisfaction, restructuring satisfaction, organizational commitment) and behavioural intentions (i.e., intent to stay/leave). The final section presents an overview of the conceptual framework for this research study.

Health Care Reform: Implications for Nursing

Reform measures, like regionalization, downsizing, restructuring, and re-engineering, have been implemented in health care organizations throughout Canada (Burke, 2001; Decter, 1997; Shamian & Lightstone, 1997) and have resulted in major changes for employees. Some of the more pervasive changes in the acute care sector have been in employee skill-mix ratios, staffing levels, degree of professional responsibility, and managerial structures (Davis & Tilley, 1996; Leatt et al., 1997). Health care reform, according to the research

literature, has the potential to significantly affect the attitudes of all levels of employees (Burke & Greenglass, 2001; Leatt et al.). While the implementation of health care reform has been extensive in Canada, much less attention has been given to investigating possible effects on organizational, provider, and consumer outcomes.

Empirical studies that focus on the consequences of reform, in particular the impact on nurses, are of great interest to researchers and health care organizations. The vast majority of studies focus on the impact of changes in patient care delivery models on clients and health care providers, especially nurses in acute care settings. There is limited research on nurses and nurse managers working in community health and long-term care. The following sections provide an overview of the reform measures that have taken place in Canada, both nationally and provincially (i.e., within the province of Newfoundland and Labrador). Empirical data on the impact of reform on nursing populations and key work-related variables, during and/or after the implementation of major health care reforms, are also presented.

It should be noted that most research studies identified in the literature examined the impact of reform on acute care providers. This is not surprising as most nurses (i.e., 64% overall in Canada, and 72% in Newfoundland and Labrador) are employed in hospital settings (Canadian Institute for Health Information [CIHI], 2000). Thus, while the impact of reform on nurses in various

practice settings (e.g., acute care, community health, long-term care, etc.) and in different work areas (e.g., direct care, administration, management, etc.) is incorporated into the following discussion, the bulk of the literature review discusses the effects of reform on nurses employed in the acute care setting.

National Reform Initiatives

The implementation of reform measures within health-delivery organizations is in response to a national commitment to control costs and increase accountability for the state of health care of Canadians. When translated into action, this has resulted in major restructuring efforts, including regionalization, downsizing, and re-engineering, in an effort to deliver health care in the most economically viable and comprehensive manner. The following is an overview of the main reform strategies identified in the research literature.

Regionalization. Health care regionalization, frequently depicted through institutional mergers and health board consolidation, has occurred in most Canadian provinces and territories (Burke, 2001; Decter, 1997; Shamian & Lightstone, 1997). This has resulted in a reduction in the number of governance structures within a defined geographic region. Decentralization, also a key feature of this strategy, involves the devolution of decision-making power from provincial governments to local regions (Lomas et al., 1997a). Despite considerable discussion in the literature on the structure and function of regional

health authorities, few studies have been undertaken of newly developed health boards in Canada . However, there is evidence that suggests, at least in its early years, regionalization may not have been as beneficial as first predicted (Church & Barker, 1998; Lomas, et al.; Markham & Lomas, 1995).

Church and Barker (1998), in an examination of regionalization efforts in each Canadian province (with the exception of Ontario), highlighted various challenges for decision-makers resulting from this initiative. Regionalization, according to the authors, has several defining features: a) the creation of regional governance bodies consisting of elected and appointed officials, b) regional control of budgets, c) a shift in the settings for delivering health care services from acute care to the community, d) emphasis on outcome evaluation, and e) restructuring and downsizing of provincial government departments. As a result of changes in service provision and delivery, several challenges have been encountered by administrators, including: a) integration and coordination of administrative functions and service delivery, b) incorporation of funds, c) creation of infrastructure to support information collection and measurement of outcomes that permit outcome-based evaluation, and d) striking a balance between encouraging participation by local citizens and preventing local groups and professional agencies from dominating the process. While the authors acknowledge the potential of regionalization to increase the effectiveness of health care delivery, contain costs, integrate and better coordinate services, and

involve consumers, they expressed concern over the limited empirical evidence available to support these claims.

Lomas et al. (1997a) surveyed board members (N = 514) of regional health authorities in five Canadian provinces (i.e., Prince Edward Island, Nova Scotia, Saskatchewan, Alberta, and British Columbia) to gather perspectives on devolution. Analysis of results identified extent of institutional autonomy as the main differentiating factor between institutions. However, there was little to no empirical support for predicted organizational benefits (i.e., financial savings, improved service quality, human resource efficiencies, and increased coordination and degree of services) of such arrangements. Conversely, it was concluded that in the initial years of multi-institutional arrangements, there may have been an increase in costs to coordinate and increase services, a decrease in quality due to reduced access, increased staff uncertainty and stress, and overall organizational instability.

In a follow-up article, Lomas et al. (1997b) explored the background, resources, and activities of board members. Findings revealed that most respondents were previously employed in sectors other than health care or social services but had experience serving on some type of board. Respondents rated the orientation and training in general governance methods as substantially better than the information received on health-related matters. In relation to availability of information for decision-making, respondents stated that service

costs and utilization data were most readily available, while data related to key informants' opinions, service benefits, and citizens' preferences were least available. Finally, the main activities of the boards consisted of prioritizing and assessing health needs, followed by ensuring service effectiveness and efficiency. An important finding from this study was the revelation that most board members were not satisfactorily prepared to carry out their expected mandate.

A second related report by Lomas et al. (1997c) described board members' attitudes and levels of motivation. Findings revealed that although most board members felt that they made good decisions which were superior to those previously made by the provincial government, they were still concerned with the inadequacy of available data on which to base decisions. While most board members believed that their priority was to represent and to be accountable to the population which they served, they were equally divided in their attitudes toward their respective provincial governments (i.e., restrictiveness of provincial rules).

In a survey of elected and appointed board members, Lewis et al. (2001) explored members' opinions of health care reforms, regionalization, and the level of success in achieving local effectiveness and efficiency in Saskatchewan. Of the 30 district health boards, a total of 275 board members participated in the survey. Overall, the results indicated that there were few differences in the

perceptions of key issues between elected and appointed board members and that most supported the general goals of health care reform. The vast majority of respondents believed that extensive reforms were necessary, that the changes had been positive, and devolution of authority had resulted in increased local control and, consequently, higher quality health-related decisions. Further, most respondents perceived that the local boards had public support and respect, were reflective of local values, and were more responsive to overall local wishes as opposed to individual stakeholders (i.e., health care provider groups, special interest groups, or government agencies). Members felt that health care reform was designed to improve health rather than reduce spending. However, most respondents felt that a vision of the reformed system was not readily identifiable, that the boards were legally responsible for things over which they had little governance, and that board activities were hampered by provincial government regulations. The authors concluded that issues and concerns related to health care reform and regionalization are similar across provincial jurisdictions.

Davis (1998/1999), a Chief Executive Officer (CEO) with the HCCSJ, reviewed the impact of regionalization and multi-institutional mergers/ consolidations (implemented as part of a provincial mandate to reduce health care costs) in Newfoundland and Labrador. Following regionalization, individual health boards recognized a number of benefits of this new system, including

increased involvement of consumers, public accountability, opportunities to be more efficient in health care spending, and staff involvement. There were also challenges to face with the creation of new boards, including higher levels of anxiety and uncertainty reported by staff and physicians from being overworked, underpaid, undervalued, and uninvolved, and increased stress as a result of fiscal restrictions.

These studies have suggested that the anticipated benefits of devolved decision-making through regionalization have not been fully attained. To the contrary, it was indicated that reforms may have had a negative effect on quality of care, work-related attitudes, perceptions of the work environment, and job-related variables across various practice settings. While there was consensus that health care reform was needed to improve the system, study results, as illustrated above, during preliminary stages of health care reform indicated that board members identified both positive and negative areas of impact.

The move to streamline services through regionalization has also created nursing practice concerns at the community level. The reduction in institutional services has necessitated the expansion (at least in theory) of community-based services as a result of shorter hospital stays and reductions in the number of inpatient beds (Decter, 1997; Shamian & Lightstone, 1997). With a greater emphasis on the delivery of home-based services to clients with increasingly complex care needs, less time and resources are available to community-based

providers for other health enhancement initiatives, such as health promotion and community development activities (Orchard, Smillie, & Meagher-Stewart, 2000).

Woodcox, Isaacs, Underwood, and Chambers (1994) explored public health nurses' perceptions prior to and following reorganization of the Nursing Division of the Hamilton-Wentworth Department of Public Health Services in Ontario. Using a longitudinal study (i.e., four data collection periods over a three-year period), and standardized instruments, the researchers explored the perceived impact of the change in practice from a generalist to population-based approach. The elements of job design (i.e., task identity and significance, skill variety, autonomy, and feedback), job satisfaction (i.e., work, pay, promotion, supervision, and coworkers), and role stress (i.e., conflict, ambiguity, and overload) were assessed. The response rates for the first time period was 80% (N = 92), followed by 58% (N = 54) for all remaining periods. There were significant differences found in public health nurses' overall job satisfaction and most components of satisfaction, with the exception of job promotion. Findings revealed that nurses reported a higher level of satisfaction at Time 4 than in the three previous time periods. However, there were no significant differences in overall job design over the time periods. The only component of job design to exhibit a significant change (i.e., decrease from Time 1 through Time 3, followed by a significant increase from Time 3 to Time 4) was task identity (i.e., the perception of the importance of one's work). Further, there were no significant

differences noted in overall role stress and most of its components, with the exception of role conflict (i.e., significant decrease between Times 2 and 3 versus a significant increase between Time 4 and Times 1 and 3). Based on inconsistent study findings and the limited significant changes in study variables, the authors deduced that organizational change had little to no impact on public health nurses' perceptions of job satisfaction, job design, and role stress.

In a study on RNs' perceptions of the impact of health care reforms, Way (1995) gathered baseline data from a stratified random sample of nurses (N = 333) in Newfoundland and Labrador. Data from community health nurses (i.e., 19 community health nurses and 45 nurses working across settings, including community health) were contained in this sample. The importance of health care reforms, quality of care and safety concerns, practice-related issues, standards of care, and the emotional climate of the workplace were assessed using a researcher-developed instrument, the Impact of Health Care Reform Scale (IHCRS). Results suggested that while most respondents were neither negative nor positive about the overall impact of health care reforms, community health nurses tended to be more positive than their counterparts working in other clinical areas. However, while this study provided useful baseline data, no current or comparative data are available on community health nurses' perception of the impact of these reforms.

Reutter and Ford (1998) used a descriptive study to investigate public health nurses' (N = 28) perceptions of changes in practice in health units in both urban and rural Alberta. Individual and focus group sessions were guided by a semi-structured interview tool. Several factors identified as having a direct impact on nursing practice, included protocol changes, budget cuts, changing community needs and demographics, health care system restructuring, and increasing use of other professionals to provide health promotion activities. Content analysis revealed five related themes, including: a) "pulling back" (i.e., staff reductions and increased workloads resulted in the need to refocus efforts to mainly deliver mandated programs); b) "from hands on to arms length" (i.e., transition from direct to more indirect involvement with clients); c) "handing over responsibility" (i.e., encouraging clients to become more involved); d) "developing working partnerships" (i.e., facilitating partnerships with other community agencies/providers and clients); and, e) "doing less surveillance" (i.e., responding to needs identified by clients and/or other professionals). While these findings suggest that some changes are perceived as increasing collaboration and client control, other changes are seen as threatening client accessibility to public health nurses, especially for programs outside of mandated services. Due to the small, convenience sample of nurses, the researchers acknowledged the limitation in generalizing the findings.

In a study of public health nurses in southern Ontario, Rafael (1999) explored the work and challenges faced by public health nurses (N = 30) during a period of downsizing (i.e., reduction in health programs, staff, and management personnel). In addition to downsizing, public health nursing service delivery was transformed from a district approach (i.e., providing for all needs of a district) to a program-specific approach (i.e., providing specific programs to a targeted population). Face-to-face interviews and focus groups were utilized to collect data. Both positive and negative effects were reported by nurses as a result of the changes to public health nursing practice. On the positive side, program-specific services were seen by some nurses as increasing their capacity to provide higher quality care than before, especially when responsible for meeting the service needs of a larger geographical area. As well, respondents were positive about new practice opportunities, developing creative partnerships, and being more involved in their communities. In contrast, nurses sensed that their profession had lost its voice in decision-making as a result of practice divisions along multiple program lines (as opposed to disciplinary lines), having to compete with peers for scarce resources, and having to report to non-nursing managers. Further, a reduction in nursing services to schools and home visiting, loss of jobs, and distancing of nurses from the client were also perceived as being negative consequences. These extensive changes in public health nursing practice were seen by the researcher as having negatively affected

nurses' feelings of autonomy and empowerment, which may potentially impact future practice in this field.

In summary, most study findings at the community level indicated that nurses employed in these settings have concerns about the impact of reforms on the emotional climate of the workplace, quality of care, standards of care, and workload (Rafael, 1999; Reutter & Ford, 1998). These findings are consistent with studies of nurses employed in various health care settings. Other research efforts have not produced consistent or significant findings on the impact of organizational change on perceptions of job satisfaction (Woodcox et al., 1994). Despite reports of negative aspects of reforms, there is evidence that reforms have also produced positive outcomes (Reutter & Ford; Way, 1995).

Downsizing. Downsizing, most often reflected in an organization's reduction in staffing levels, is one of the most common initiatives used in institutional settings to control spending. Downsizing includes measures such as elimination of positions (e.g., through redundancy, early retirement, position cutbacks, use of casual employees, etc.), contracting outside services, and organizational structural redesign (Leatt et al., 1997; Luthans & Sommer, 1999; Sochalski, Aiken, & Fagin, 1997).

There are numerous research studies that explored the impact of downsizing on the work life of nurses in various practice settings (Acorn & Crawford, 1996; Aiken et al., 2001; Baumann et al., 2001; Blythe et al., 2001;

Burke, 2001). Existing empirical data support a decline in nurses' work-related attitudes (e.g., dissatisfaction with pay and promotion opportunities, loss of trust, lower productivity, etc.), workplace conditions (e.g., reduction in front-line staff and management positions, greater role expectations and responsibilities, etc.), and quality of care as a result of reductions in human and financial resources (e.g., Armstrong-Stassen et al., 1996; Baumann et al., 2001; Burke; Leatt et al., 1997; Laschinger et al., 2000, 2001; Woodward et al., 1999, 2000). There have also been significant repercussions for all levels of nurses, including front-line staff and management personnel (Baumann, et al., 2001; Woodward, et al., 1999, 2000). The following is a discussion of the perceived impact of downsizing initiatives on nurses' perceptions of work life, work-related attitudes, and quality of care across various acute care work settings.

Studies were identified from the literature that focussed on the scope of downsizing initiatives (Baumann et al., 1996), perceptions of the consequences of downsizing (Armstrong-Stassen et al., 1996; Baumann et al., 1996, 2001; Burke, 2001; Laschinger et al., 2000, 2001), and of changing roles and responsibilities during early stages of downsizing (Acorn & Crawford, 1996).

Baumann et al. (1996) used an unstructured interview technique to examine the impact of downsizing strategies on staff nurses (N = 129) working in 20 acute care hospitals in Ontario. Focus groups held with RNs (n = 104) and registered practical nurses (RPN) (n = 25) revealed several important issues,

including diminished attention to the caring aspects of their jobs and increased desire for management to involve them in decision-making and to include them on committees. Further, nursing staff perceived staffing actions such as transfers to other units, reduction in work hours, early retirement packages, and permanent to casual status, as job loss.

Armstrong-Stassen et al. (1996) used a longitudinal panel study to examine changes in job satisfaction for full-time (n = 232) and part-time (n = 112) nurses (i.e., RNs and RPNs) before and after downsizing in three community hospitals in southwestern Ontario. Baseline data on job satisfaction were collected in early 1991 prior to downsizing, and follow-up data were collected in late 1992 post-implementation. Instruments included the Minnesota Satisfaction Questionnaire (MSQ) to assess overall job satisfaction, and the Index of Organizational Reactions (IOR) to measure satisfaction with one's job and the work environment. All scales were reported as having well-established reliability and validity. Study findings failed to document significant differences in overall satisfaction, or satisfaction with aspects of the job and work environment for work status (i.e. full- and part-time) before or after downsizing. However, there were significant time effects for satisfaction. Both groups of nurses reported lower ratings on most aspects of job satisfaction (i.e., career future, hospital, supervisors, and co-workers, respectively) following downsizing, with the exception of monetary rewards. Specifically, the nursing staff reported being

less satisfied with the organization (i.e., poor treatment of employees, not a good place to work, and employee well-being less important than financial concerns), supervisors (i.e., disappointment with managerial style and perceived negative impact on overall job attitudes), co-workers (i.e., increased tension), and career future with the hospital (i.e., decreased feelings of job security and promotion opportunity, and consequential negative impact on overall job attitudes).

From the preliminary results of a study of staffing, organization, and client outcomes from 711 hospitals in five countries, Aiken et al. (2001) reported on select findings from nurses (N = 43,329) working in adult acute care hospitals in 1998 and 1999. All nurses working in all hospitals within the three Canadian provinces of British Columbia, Alberta, and Ontario were included in the study (n = 17,450). A self-administered, researcher-developed questionnaire was used to gather data on nurses' perceptions of their work environments, quality of nursing care, job satisfaction, career intentions, and burnout. Study findings revealed that the majority of nurses perceived staffing levels to be less than sufficient to ensure the delivery of high quality care and to meet work expectations. Specifically, half of the respondents believed that the quality of patient care had deteriorated over the past year. Nurses reported that they were being assigned more patients, were often completing tasks outside of their professional responsibilities (e.g., cleaning, transporting patients, etc.), and were frequently not able to meet basic patient care needs (e.g., personal care, teaching, provide

comfort measures, etc.). As well, only one-third felt that their patients were adequately prepared for discharge. Further, the majority of nurses reported receiving client and family complaints and verbal abuse more regularly in the past year. With regard to managerial relations, more than half of the nurses felt that hospital management was not responsive to their concerns and did not provide opportunities for participatory decision-making or career advancement, or acknowledge the important contribution that nurses make to care provision. Further, the job dissatisfaction and burnout reported by almost half of the respondents were attributed to the job-related strain, emotional exhaustion, and overwhelming work demands due to insufficient numbers of nurses available to provide care. On a positive note, most nurses felt that salaries were satisfactory, nurse-physician relationships were positive, and work colleagues (i.e., physicians and nurses) were clinically competent and able to provide high quality care. Based on the study findings, the researchers concluded that the current hospital climate has resulted in increased frustration and dissatisfaction to both clients and nurses, which has, in turn, contributed to higher rates of nursing burnout and greater intent to leave the profession.

Through a provincial-wide survey, Laschinger et al. (2001) investigated the perceived impact of restructuring on working conditions in Ontario hospitals in a subset of nurses (n = 230). Several themes emerged from the data. First, nurses most frequently cited concerns related to quality of work life (i.e.,

increased workload, casualization, job insecurity, and emphasis on cost constraints; and decreased career opportunities, financial rewards, support for continuous learning, and job satisfaction). A second expressed concern was with the perceived negative impact of system changes (i.e., reduction in available resources, inadequate staff and skill mix levels, increased safety issues, and increased cross-sharing of personnel) on the delivery of quality of care. Third, relations with management were felt to be strained (i.e., lack of support, positive feedback, and recognition; inadequate information flow about system changes; increased reliance on an authoritarian style; preoccupation with finances; mistrust; and reduced accessibility subsequent to role changes). Finally, it was felt that work conditions had an additive effect on nurses' feelings and attitudes (i.e., increased burnout and low morale; increased stress, anxiety, and worries; decreased loyalty/commitment; declining physical health; and greater turnover/intent to leave). Overall, the researchers concluded that concerns expressed by this sample of nurses supported increased feelings of powerlessness and decreased satisfaction with the quality of work life.

Other consequences of downsizing on nurses related to changes in roles and responsibilities. Acorn and Crawford (1996) reported on the job characteristics of first-line nurse managers (N = 200) working in 41 acute care hospitals with more than 100 beds in British Columbia in the aftermath of fiscal restraint measures. A researcher-developed instrument was used to collect data

on personal characteristics. The findings indicated that most respondents had five or more years of supervisory experience, held the position title of head nurse or nurse manager, and were currently members of the nurses' union. As well, slightly less than half had been in their current positions for more than five years, and had baccalaureate or higher educational preparation. With regard to roles and responsibilities, most managers reported being responsible for one unit or service area averaging 40 or less beds, supervising less than 50 staff members, managing an annual budget of more than $1 million, and having one hierarchical level between them and the chief nursing administrator.

Baumann et al. (2001) examined RNs' (N = 1, 453) perceptions of job change (i.e., new role, new unit, or new hospital) as a result of restructuring (i.e., downsizing and merging of facilities) in two large teaching hospitals in Ontario. Commitment to the profession, quality of work environment, and quality of care were assessed using The American Journal of Nursing Care Survey. Team effectiveness, participation in redeployment planning, and job change experiences were measured using researcher-developed scales. Organizational commitment was measured with the OCQ. Most respondents felt that restructuring initiatives resulted in increased workloads, higher patient acuity, and more client complaints. Further, respondents described feeling that they had less time to devote to teaching clients and their families, provide basic care and comfort, interact with patients, and document care provision. Almost one-

half of the nurses had experienced job changes within the past four years. These nurses felt they were less able to meet professional standards of care, and had less time to provide basic nursing care, to adequately document care and to talk with and comfort clients than those who had not changed jobs. Furthermore, nurses in the job change group were more likely to perceive greater increases in workload, patient acuity, patient/ family complaints, unexpected re-admissions, and medication errors than those who had not changed jobs. Nurses who had moved to a new hospital experienced more grieving and were less committed than those who had moved to a new unit or remained on their unit in a new role. Significantly, nurses assuming a new role within the same unit felt more a part of the health care team, rated the team's effectiveness higher, and perceived less need for new knowledge, new skills, or a comprehensive orientation than nurses moving to new units and new hospitals.

Existing empirical data also support the far-reaching effects of organizational change on nurses well-being. Using a qualitative design, Keddy et al. (1999) interviewed nurses' (N = 38) from all areas of Nova Scotia who were experiencing job displacement, underemployment, or unemployment to capture the impact of healthcare reform on nurses' personal and social lives. A feminist interactive technique was used to interview participants on the following content areas: present and past employment status, expectations with regard to employment upon graduation and currently, understanding of the status of

nursing and health care reform in the province, and the impact of their present status on their personal and professional lives. Thematic analysis was used to identify major themes in the data. First, "living day by day" described the uncertainty that accompanies casualization and job displacement, and resulting anger and frustration of being easily replaceable. Second, "the effects of children, partners, friends and leisure" described how nurses were faced with juggling childcare responsibilities with work, and sacrificing personal and family time to be available to work on very short notice. Third, "financial burdens" characterized feelings of hopelessness about having to collect employment insurance benefits or depending on others to support themselves and their families.

Using a cross-sectional survey design, Maurier and Northcott (2000) explored nurses' (N = 271) perceived stressors and effects on health while working in the midst of health care restructuring in an urban acute care teaching hospital in Alberta. A researcher-developed Likert-type scale measured physical health (i.e., tiredness, loss of appetite, irritability, sleeplessness, dizziness, headaches, muscular aches and pains, and depression) and the 20-item Center for Epidemiological Studies Depression Scale measured depression (i.e., depressed mood, feelings of guilt and worthlessness, feelings of helplessness, loss of appetite, and sleep disturbances). Results revealed that out of 14 possible stressors, the single most stressful work condition was the possibility of

job loss. This was followed by replacement of nurses with nursing aides (i.e., job uncertainty), inability to meet the demands of patients and their families, as well as other health professionals (e.g., physicians, co-workers, etc.), insufficient time and resources to provide emotional support to patients and their families, and working with inexperienced nurses (as a result of bumping of nurses into other units based on seniority versus experience). In relation to health, job uncertainty (i.e., job loss as a result of bumping and layoff) was significantly associated with poorer physical health (explaining 16% of the variance), followed by physical working conditions (explaining 6% of the variance). The authors concluded that the higher the perceived threat to job security, the poorer the physical and mental health of the nurse. These results suggest that nurses are experiencing dramatic health effects as a result of healthcare restructuring.

In summary, the findings from the preceding studies indicated that there have been significant effects on nurses across various practice settings. There is also an extensive research base suggesting that nurses are perceiving many of the changes associated with downsizing in a negative light. For successful downsizing, it is particularly important to deploy a planned strategic approach that will minimize the negative effects on all levels of employees. While decentralization seeks to increase decision-making and responsibility, it can also increase job demands and stress, role conflict and ambiguity, as well as other job-related factors. Empirical evidence suggests that achieving a meaningful

balance between work demands and diversity, and having autonomous decision-making are integral to nurses' satisfaction and well-being.

Re-engineering/restructuring. Re-engineering and restructuring are common approaches implemented by acute care institutions. Re-engineering involves re-thinking work processes with the goal of increasing efficiencies in the system of care delivery. This is accomplished by various means, including reducing labour costs, increasing the skill-mix of staff, cross training employees, reducing lengths of stay, and implementing client-focussed care through the use of a multi-disciplinary team approach. Restructuring involves realigning the strategic goal of an organization so as to provide a comprehensive range of services across a care continuum. To improve efficiencies, programs are evaluated based on their ability to provide essential services and strategic alliances and inter-organizational arrangements are created to improve service delivery (Leatt et al., 1997). Several Canadian studies were identified from the research literature that reported on the negative impact of hospital mergers on work environment and job-related factors, and employee attitudes (Best, Walsh, Muzin, & Berkowitz, 1997; Blythe et al., 2001; Woodward et al., 1999, 2000).

Best et al. (1997) used a longitudinal study design to explore the effects of a "Healthy Hospital" project directed toward improving staff participatory decision-making. Baseline data were gathered from various employee groups, including RNs (n = 164), with supplementary data gathered at 1 and 2 years

post-implementation (n = 102 and 82, respectively). Additionally, focus groups were utilized to collect data twice during project implementation. The Job Content Questionnaire (JCQ) measured job stress, the McCloskey Mueller Satisfaction Scale (MMSS) assessed job satisfaction, the Work Environment Scale evaluated relationships, personal growth, and system maintenance and change, and the Organization-Based Self Esteem Scale measured work-related self-esteem. Nurses reported a significant increase in job demands, decision latitude, and social support from baseline to one year post-implementation. While significant changes were observed between baseline and year one for overall job satisfaction, the gains in self-esteem and select satisfaction factors were either maintained or lost by Time 3. Similar inconsistencies were observed for the work environment variables. The findings from the focus group discussions indicated that program priorities should focus on improving communications and increasing participatory decision-making. Further, many of the group members felt that only moderate progress had been made toward developing a culture of participatory management, and that management was not visibly committed to participatory decision-making.

Following re-engineering initiatives and a merger with another hospital, Woodward et al. (1999) used a random sample of staff (N = 346) working in a large teaching hospital in Ontario to document the perceived impact of reforms on select personal, job, and work environment factors, as well as quality of care.

Several scales, with reported acceptable levels of reliability, were used to collect information on job characteristics, psychological distress, emotional exhaustion, depression, personal resources, family and work interference, perceptions of hospital as employer, perceptions of quality of care and services, overall quality, and demographics. Findings indicated that there were significant increases in job demands, job insecurity, and lack of role clarity but no significant changes in job influence and decision latitude. There were also significant increases in psychological distress (i.e., anxiety, depression, and emotional exhaustion), as well as interference with work and family life. Significant decreases were found in perceived co-worker and supervisory support and effectiveness of teamwork, as well as staff perceptions of quality of care, quality improvement initiatives, staff/organizational relations, and overall impressions of the work environment.

In a second, related article, Woodward et al. (2000) reported on changes in select job characteristics, personal resources, home and job interferences, job satisfaction, and levels of stress among front-line staff, designated, and non-designated supervisors (N = 380). The findings demonstrated that all levels of workers experienced significant increases in job insecurity, demands, stress, and interference with their personal lives. Significant decreases were reported in role clarity, supervisor and co-worker support, teamwork, and job satisfaction. Non-designated supervisors and staff had significantly higher job insecurity, and lower job influence and decision-making latitude than supervisors. It was also revealed

that front-line staff worked less hours than both non-designated and designated supervisors, and non-designated supervisors had less decision latitude and job influence than designated supervisors.

Blythe et al. (2001) used semi-structured focus group interviews to explore the effects of restructuring on the work and personal lives of acute care nurses (N = 59) in three Ontario communities. All three hospital sites had introduced restructuring strategies (i.e., closing units, merging units and hospitals, laying off employees, and eliminating middle management positions) prior to the study. Content analysis revealed three themes which described the major effects of restructuring: "fragmentation of relationships," "increasing uncertainty and unpredictability", and "disempowerment." Participants identified individual effects (i.e., less energy for family needs, less separation of home and work lives, more distant relationships with colleagues, decreased control, difficulty meeting patient care needs, maintaining professional standards, role responsibilities, and acceptable levels of patient care), as well as nursing team effects (i.e, loss of experienced/skilled nurses, greater role uncertainty, heavier workloads, decreased socialization, and decreased leadership), and organizational effects (i.e., decreased staff/management relations, decline in quality, poor communication, insufficient support, lack of trust, breaking of psychological contract, and altered commitment). The authors acknowledged the connection between job satisfaction and organizational commitment in this study.

Summary. While there was consensus that health care reform was needed to improve the system, study results during the preliminary stages of reform indicated that board members and all levels of employees identified both positive and negative areas of impact. Significant areas of perceived negative effects were related to quality of patient care and several job characteristics and work environment factors (e.g., autonomy, role clarity, job demands, uncertainty, stress levels, job satisfaction, etc.). More specifically, nurses' perceptions of the impact of regionalization and downsizing on key job-related and work environment factors (e.g., decreased job influence and job security, increased workload/demands, decreased co-worker and supervisor supports, increased stress, decreased quality of care, etc.) were more negative than positive.

Provincial Reform Initiatives

In the province of Newfoundland and Labrador, regionalization of health care services was the first level of reform. Between April 1994 and January 1996, changes in the governance of health services occurred as a result of institutional mergers and regionalization of health boards (resulting in a reduction in boards from 40 to 14) (Davis, 1998/1999). While there were a number of projected advantages of this move (i.e., cost effectiveness, increased consumer involvement and public accountability, and greater influence on health public policy and determinants of health), there was increased concern and uncertainty

among health care staff, including nurses, who felt excluded from the decision-making process.

There were three studies conducted in Newfoundland and Labrador during the early stages of health care reform. The Association of Registered Nurses of Newfoundland (ARNN) commissioned two studies, one qualitative and one quantitative, to investigate nurses' perceptions of the impact of health care reform (Way, 1994, 1995). A third study was undertaken with acute care nursing staff in three hospitals one year (i.e., 1996) after institutional consolidation (Pyne, 1998).

In the initial study, the ARNN used a qualitative survey to assess nurses' (N = 347) perceptions of the impact of health care reform throughout the province. The ARNN Health Systems Changes Questionnaire evaluated attitudes towards health care reforms, negative changes experienced in the work environment, impact of negative changes on patient care and nursing practice, and the potential for positive changes or opportunities. Analysis of responses revealed that most nurses (86.5%) perceived changes resulting from reform measures to be negative and that the demands of caregiving under current conditions were stressful (Way, 1994). Specifically, job satisfaction, quality of patient care, and professional practice were negatively affected by reductions in staff, overwhelming workload demands, and increased role responsibilities. Further, results indicated that workplace and quality of care issues were more of

a concern than professional practice and safety concerns. However, some nurses (42.4%) identified several areas in which change produced positive results (i.e., improvements in resource utilization, health care delivery, and innovative roles and opportunities).

Following this study, Way (1995) used a survey design and a random sample of RNs (N = 333) to acquire baseline data on the perceived effects of health care reform. The IHCRS was used to assess the importance of health care reforms, quality of care and safety concerns, practice-related issues, standards of care, and the emotional climate of the workplace. Study findings indicated that most respondents were neither totally negative nor positive about the overall impact of health care reform. Comparatively, nurses viewed the importance of reforms, practice-related issues, and safety issues more positively than quality of care, the emotional climate of the workplace, and standards of care. These findings are congruent with those reported by Way (1994), especially concerns about the work environment and quality of care. As well, managers and older, higher educated nurses perceived all aspects of reform more positively than staff, younger, and less educated nurses.

Pyne (1998) used a descriptive, correlational design to explore acute care nurses' (N = 298) perceptions of the impact of health care reform and job satisfaction levels. One year prior to data collection, the hospitals had been consolidated under the HCCSJ, and at six months prior to data collection,

program-based management and a professional practice model were implemented at all sites. Data were collected from nurses working in critical care, medical, and surgical area using the IHCRS and the MMSS. The MMSS assessed job satisfaction in eight content domains (i.e., extrinsic rewards, scheduling, work/family balance, co-workers, interaction opportunities, professional opportunities, praise/recognition, and control/responsibility). The findings indicated that nurses were more negative than positive about the impact of health care reform and slightly dissatisfied with their jobs. The majority of respondents were most positive about the importance of reforms, safety issues, and practice-related issues, respectively. Conversely, nurses were most negative about quality of care, emotional climate, and standards of care, respectively. While many of these ratings were similar to that of Way (1995), there was a statistically significant decline in the mean scores for the overall impact of reform, as well as the subscale scores. In relation to levels of satisfaction, the majority of nurses were most satisfied with coworkers and interaction opportunities, and least satisfied with control/responsibility and extrinsic rewards. The use of a non-probability sample limits the generalizability of study findings.

Summary

While there has been considerable research on the impact of reforms, such as regionalization, downsizing, and re-engineering, study findings are varied and reflect a wide range of possible effects on nurses (e.g., front-line staff, managers, administrators, etc.). Conflicting findings exist on the type and intensity of stressors (e.g., job security, job stress, workload, role changes, responsibilities, etc.) reported by nurses in the midst of reform initiatives, as well as the impact of reform on job-related factors, the work environment, and nurses' attitudes across various practice settings. Further research is needed to explore the separate and interactive effects of reforms on providers.

Factors Influencing Provider Outcomes

Numerous models and frameworks have been generated to explain the type and importance of factors influencing nurse turnover behaviour (e.g., Alexander et al., 1998; Irvine & Evans, 1995; Mobley et al., 1979; Mueller & Price, 1990; Parasuraman, 1989; Price & Mueller, 1981, 1986). While the models differ in the level of complexity and the number of factors theorized to predict behaviour, most describe a causal, linear approach involving determinants (e.g., job-related factors, employment environment, etc.), intervening attitudes (e.g., organizational and job satisfaction, organizational commitment, etc.), intervening behaviours (e.g., intent to stay/leave, etc.), and

correlates (e.g., personal characteristics, demographic, etc.). Modified versions of a particular causal model have been used in multiple studies to guide the research process. The construct of psychological contract violation has not received any attention in models of nursing turnover. However, it has recently been integrated into causal models in the business literature. Turnley and Feldman (1998, 1999) proposed an integrated causal model that depicts psychological contract violation as resulting from changes in job-related and work environment factors. It is conjectured that the scope and magnitude of contract violation may be moderated by situational factors and personal characteristics. Finally, psychological contract violation is believed to impact organizational commitment and intent to engage in job search or quit activities.

The following sections identify the various levels of outcome in the current research study according to select intervening and outcome variables (i.e., psychological contract violation, job satisfaction, restructuring satisfaction, organizational commitment, and intent to stay).

Psychological Contract Violation

Psychological contract is defined as a belief in the existence of an implicit, reciprocal agreement established between two parties, usually an employer and an employee, that is continuous and long-term (Rousseau, 1990). Such a contract commences when one party believes that a promise of future return has

been made (e.g., job security, etc.), a contribution has been given (e.g., loyalty, etc.), and that the terms and conditions of the contract have been accepted by both parties (Rousseau). The psychological contract extends well beyond employee expectations; rather, it is comprised of the perceived mutual obligations that characterize the relationship between the employer and the employee (Robinson & Rousseau, 1994). These contracts may be interpreted as transactional (i.e., short-term, monetary based) or relational (i.e., long-term, non-monetary based).

Breaking or violating a psychological contract occurs when an organization fails to respond to an employee's contribution in the way the person believes they are obligated to do so (Morrison & Robinson, 1997; Robinson & Rousseau, 1994; Rousseau, 1989). When an organization is either no longer able to promise the traditional career and job security, or it violates its promises to the employee as a result of these changes, distrust and dissatisfaction and possibly dissolution of the employer-employee relationship can occur. Morrison and Robinson (1997) proposed a theoretical model to explain the sequence of events that precede the development of a perceived violation. The researchers conceptualize the formation of psychological contract violation as having both cognitive (i.e., perceived breach) and affective (i.e., perceived violation) components. A perceived breach refers to an employee's interpretation that there is incongruence between expected and met obligations. Violation refers to

the emotional response of the employee to the failure of the employer to meet the expectations of the psychological contract. It should be noted that the perception of psychological contract violation is dependent on the associated meaning of perceived breach held by the individual employee.

Health care reform can bring about unexpected results despite extensive preplanning and employee preparedness. One potential effect of health care reform is the impact on contracts perceived to exist between employees and the organizations who employ them. During times of organizational restructuring and change, there can be fluctuation in, or transformation of, an employee's psychological contract. Although studies exist on the nature of the psychological contract, the process by which it develops remains vague. The following discussion presents an overview of studies that examine the nature, effects, and consequences of psychological contract violation. The role of situational factors in moderating the impact of contract violation on employee behaviours and attitudes is also presented.

Contextual/personal factors and contract violation. Robinson and Rousseau (1994) used a longitudinal design to examine the nature and occurrence of psychological contract violation in a sample of MBA alumni (N = 209) immediately following recruitment and two years after initial employment. Contract violation was measured using a single 5-point item scale, a yes/no item, and an open ended question that asked participants to describe the violation

experience. The majority of respondents (54.8%) reported they experienced at least one instance of contract violation by the employer. Analysis of the content of responses identified ten categories of violation (i.e., compensation, training/development, promotion, job security, nature of job, management of change, feedback, people, responsibility, and other). The training/development, compensation, and promotion were the most commonly reported violations. Further, the results suggested that those respondents who tried to rectify the perceived violation were more likely to report higher levels of contract fulfilment than those who did not seek to remedy the situation. Study limitations included the use of a single-item to measure psychological contract and the restrictiveness of the sample.

Turnley and Feldman (1998) examined the nature, extent, and consequences of psychological contract violation experienced by managers and executives (N = 541) from three arenas (i.e., bank, state agency, and business school graduate alumni) during organizational change efforts (e.g., restructuring, downsizing, mergers, acquisitions, etc.). A 4-item researcher-developed scale was used to assess psychological contract violation (i.e., overall violation and discrepancies in commitments and rewards). The internal consistency of the scale was reported to be high (α = 0.86). Sixteen job factors gained from previous research (i.e., job security, input into decisions, opportunities for advancement, health care benefits, responsibility and power, base salary,

feedback, overall benefits, organizational support for personal problems, regularity of pay raises, job challenge and excitement, supervisor support for work problems, career development, training, retirement benefits, and bonuses for exceptional work) were used to measure perceived violation. A 5-point scale, ranging from -2 (*received much more than promised*) to +2 (*received much less than promised*), was used to rate obligations. Situational variables (i.e., procedural justice or fairness of organizational decision-making policies, likelihood of future violation, and quality of work relations with supervisors and colleagues), believed to moderate the impact of employee reactions to psychological contract violation, were rated dichotomously (*low* or *high*). Results indicated that approximately one-quarter of the sample experienced psychological contract violation. When respondents perceived the situation to be beyond the control of the organization, contract violation was not reported. In contrast, when the organization's actions were perceived to be deliberate and unnecessary, respondents were more likely to report contract violation. Further, in organizations that had undergone significant restructuring, managers were much more likely to report violation than those in securer work environments. As well, managers in more extensively restructured organizations were significantly more likely to report problems with job security, input into decision-making, opportunities for advancement, health care benefits, and amount of responsibility and power. Lastly, the situational factors of high procedural justice, pay raises,

and promotions, low likelihood of future violation, and positive working relationships with supervisors cushioned the impact of psychological contract violation. The researchers concluded that clearer communications and initiatives to create more cohesive relationships between staff and managers were necessary to mediate the negative impacts of psychological contract violation.

In a follow-up study, Turnley and Feldman (1999) re-evaluated the relationships among employees' psychological contract violation and their consequences, as well as the effects of situational factors on these relationships. A fourth group (i.e., expatriates and managers in international business, n = 263) was added to the original sample (n = 541). The same scales reported by Turnley and Feldman (1998) were used to measure the consequences of psychological contract violation variables. Select situational variables included availability of attractive employment alternatives, the external justification of the contract violation, and the degree of procedural justice in the employer's decision-making practices. The results demonstrated that psychological contract violation occurred more often and was more extreme among respondents working in environments that had experienced major restructuring, particularly in relation to the aspects of job security, compensation (i.e., promised and actual pay raises, salaries, and bonuses), and opportunities for advancement.

Consequences of contract violation. In a sample of MBA alumni (n = 209), Robinson and Rousseau (1994) explored the impact of psychological

contract violation on employees' attitudes and behaviours. Researcher-developed scales that were reported to be reliable and valid were used to collect data. The scales evaluated employee careerism orientation (i.e., orientation toward the employer as an influential means of progressing in one's career), trust (i.e., degree of trust in the employer), satisfaction (i.e., satisfaction with both work and the organization), psychological contract violation, and remaining with one's employer (i.e., intention to remain and actual turnover). Greater psychological contract violation was strongly associated with lower levels of satisfaction, trust, and intent to remain with the employer, but moderately associated with actual turnover. Perceived contract violation accounted for 16% of the explained variance in intent to remain. Furthermore, careerism mitigated the relationship between violation and trust, but did not influence the impact of violation on satisfaction, intentions to remain, or actual turnover. It was concluded that contract violation may have a similar negative impact on employees who intend on maintaining long-term employment with an organization or who consider current employers as positively influencing career advancement.

The consequences of psychological contract violation for employees (n = 541) in firms undergoing extensive restructuring and downsizing were also explored by Turnley and Feldman (1998). The consequences of contract violation (i.e., exit, voice, loyalty, and neglect behaviours) were examined using four well-established tools having good reliability. Findings indicated that higher

levels of psychological contract violation were significantly associated with lower levels of loyalty and higher exit, voice, and neglect behaviours. Moreover, managers employed in firms experiencing restructuring were much more likely to contemplate quitting, more likely to search for a new job, and less likely to be loyal to their employers than their counterparts working in more stable firms. In addition, managers who perceived a high degree of procedural justice (i.e., in relation to fairness of layoff procedures and pay raises and promotions), low likelihood of future violation, and good relationships with supervisors and coworkers were significantly more likely to remain loyal to their organizations, less likely to intend to quit or engage in job search behaviours, and less likely to engage in voiced oppositions to upper management. In contrast, only managers who perceived a low likelihood of future violation and good working associations with coworkers were significantly less likely to engage in neglect behaviours.

In a subsequent study, Turnley and Feldman (1999) re-evaluated the relationships among perceived psychological contract violation and their consequences, as well as the moderating effects of select situational factors in a sample of managerial-level personnel (N = 804). The findings indicated that the greater the level of psychological contract violation, the more likely managers were to consider leaving the organization, voice their objections to upper management, neglect in-role job performance, and have lower levels of organizational loyalty. Furthermore, it was revealed that all the situational

variables had a buffering effect on the relationship between contract violation and exit behaviours (i.e., managers were more likely to search for other job opportunities when contract violation was high, attractive job alternatives were available, insufficient justification existed for the organization's actions, and procedural justice was low). Conversely, situational factors did not moderate the relationships between psychological contract violation and voice, loyalty, or neglect behaviours. Age, gender, and tenure were not associated with situational factors.

Summary. While psychological contract is a comparatively new construct in both theoretical and research literature, consistent empirical support appears to exist for the negative influence of psychological contract violation on employee trust, job satisfaction, job security, organizational loyalty, and likelihood of remaining with current employers. In addition, it has been proposed that the psychological contract is a significant factor in determining the relationship between an employer and employees, and perceived violation of implied contracts can significantly weaken this relationship.

Job Satisfaction

There are numerous definitions of job satisfaction identified in the research literature. Most frequently, job satisfaction is described as the affective response of an employee to his/her job or specific components of the job

(Mowday, Steers, & Porter, 1979; Price & Mueller, 1986). Research studies have explored both overall job satisfaction and satisfaction with specific job components (e.g., work environment, pay, workload, relations with coworkers and supervisors, etc.) (Price & Mueller, 1986). The concept of job satisfaction has been included in all major turnover models (Alexander et al., 1998; Curry, Wakefield, Price, Mueller, & McCloskey, 1985; Irvine & Evans, 1995; Mueller & Price, 1990; Parasuraman, 1989; Price & Mueller, 1986). To better operationalize this construct, a number of measures have been generated that explore various components of job satisfaction (e.g., Index of Job Satisfaction, Job Satisfaction Scale, MMSS, etc.).

Within the changing health care environment, much thought has been given to job satisfaction as it has been consistently associated with other related health outcome measures, such as nurse performance, quality patient care, and cost savings (Davidson, Folcarelli, Crawford, Duprat, & Clifford, 1997; Pyne, 1998). Higher levels of employee job satisfaction have been associated with greater decision-making abilities, an environment conducive to employee input and autonomy, greater prospects for promotion and career advancement, and work diversity (Blegen, 1993; Irvine & Evans, 1995).

As the majority of nurses are employed within acute care settings (CIHI, 2000), the bulk of studies have been conducted within this environment. Thus, the following discussion is largely representative of this population of nurses;

however, attention has been given to studies that represent nurses across all settings, where available.

Meta-analytic studies. Two meta-analytic studies identified key variables which influenced nurses' job satisfaction (Blegen, 1993; Irvine & Evans, 1995). These studies present the most comprehensive reviews, as well as the most accurate documentation, of the type and magnitude of factors influencing nurses' job satisfaction.

Using data gained from a review of 48 studies of staff nurses (N = 15,048) working in geographically diverse health care settings, Blegen (1993) investigated the strength and direction of factors thought to influence job satisfaction. Only those studies which used quantitative measures, investigated nurses' providing direct care, reported an overall job satisfaction score, and reported bivariate correlations between job satisfaction and other independently measured factors were included in the meta-analysis. Thirteen variables associated with job satisfaction consisted of personal attributes (i.e., age, education, years nursing experience, and locus of control), and organizational characteristics or job attitudes (i.e., stress, supervisor communication, peer communication, autonomy, routinization, recognition, fairness, and professionalism). The variables depicting the strongest and most consistent relationship with job satisfaction were job-related and work environment factors. Findings also demonstrated that greater job satisfaction was strongly associated

with lower stress levels and greater organizational commitment. Increased job satisfaction was moderately associated with greater communication with supervisors and peers, greater work autonomy and recognition/feedback, and less routinization. Perceived fairness of pay (i.e., salaries and benefits) exhibited low to moderate correlations with greater job satisfaction. In relation to personal characteristics, less external locus of control demonstrated a low to moderate association with greater job satisfaction, while greater age, more years experience, and lower education levels depicted low but significant correlations with greater job satisfaction. The researcher identified job satisfaction as being a complex construct warranting further investigation so as to examine the separate and interactive effects of influencing factors.

In a second meta-analytic study, Irvine and Evans (1995) utilized a modified version of the causal model of turnover (Mueller & Price, 1990) to identify the most important determinants of job satisfaction for nurses. The model proposes that economic (i.e., pay and other job opportunities), sociological/structural (i.e., work environment and job attributes), and personal (i.e., age, work experience, and organizational tenure) variables have a direct impact on job satisfaction. The findings indicated that most of the job characteristics and work environment variables depicted moderate to strong correlations with job satisfaction. However, economic and psychological factors were in the lower range. Specifically, higher levels of job satisfaction were

correlated with greater autonomy and feedback, less routinization, role conflict, role ambiguity, and work overload. In relation to work-related variables, higher levels of job satisfaction were associated with more effective supervisory relations and supervisory leadership, greater advance opportunity, greater participation, and less stress. Higher pay was moderately associated with higher job satisfaction, while greater employment opportunity depicted a small correlation with lower levels of job satisfaction. The personal characteristics depicted low, positive correlation with job satisfaction. Lastly, higher job satisfaction was strongly associated with less intentions of leaving and a greater intent to stay.

Overall, the results of the studies included in the meta-analyses supported contextual factors as having a stronger influence than personal factors on nurses' job satisfaction. It should be noted that it is the contextual factors (e.g., job content, work environment, etc.) that are most easily manipulated by administrators and managers through such strategies as job design, appropriate leadership, and human resource management practices.

Diverse nursing populations. Cavanagh and Coffin (1992) investigated key variables believed to impact turnover behaviour in a sample of full-time RNs (N = 221) working in hospitals in the United States. Scales developed by Price and Mueller (1981) were used to assess key determinants (i.e., job opportunities in the external environment, kinship responsibility, community participation,

education and training, pay, promotion, routine, and instrumental communication), job satisfaction, and intent to stay. The findings demonstrated that greater kinship responsibilities, opportunities for promotion, participation in decision-making, and routinization demonstrated moderate to strong correlations with higher levels of job satisfaction. In contrast, greater external job opportunities, higher pay, and higher education depicted moderate to strong correlations with lower levels of job satisfaction. Path analysis revealed that participation decision-making, routine, opportunities for promotion, kinship responsibilities, and alternative job availability were the most significant predictors of job satisfaction, respectively.

Acorn, Ratner, and Crawford (1997) investigated the predictive effect of select factors on job satisfaction in a sample of first-line nurse managers (N = 200) working in acute care settings in British Columbia. The Index of Centralization, the autonomy subscale of the Job Characteristic Inventory, the OCQ, and MMSS were used to assess decentralization, autonomy, organizational commitment, and job satisfaction, respectively. Findings indicated that nurse managers were generally very satisfied with their jobs and reported high levels of autonomy, organizational commitment, and decentralization. During path analysis, higher degrees of decentralization and autonomy were found to have a direct, positive effect on job satisfaction. That is, managers who rated their organizations as being very or extremely decentralized and perceived

that they had greater autonomy also had higher levels of job satisfaction than their counterparts in more centralized systems with less autonomy. Of particular significance was the finding that decentralization and autonomy combined to explain 32% of the variance in job satisfaction. The correlates (i.e., age, marital status, gender, education, years of management, and heath/vitality status) failed to enter the regression model.

Six months post-hospital redesign but prior to hospital closure and merger of services, Pyne (1998) examined the influence of the impact of health care reform and personal characteristics on the job satisfaction of nurses (N = 298) . Strong, positive correlations were depicted between all impact variables and job satisfaction. During regression analysis, four impact variables (i.e., workplace conditions, safety concerns, quality of care concerns, and professional issues) and three correlates (i.e., age, area of employment, and current position tenure) combined to explain 48.8% of the variance in job satisfaction. The researcher concluded that health care reform appeared to have a negative impact on job satisfaction.

Using an exploratory correlational design, Cumbey and Alexander (1998) explored the relationships among three organizational variables (i.e., structure, technology, and environmental uncertainty) in a public health department's staff (800 RNs, 31 licenced practical nurses, and 7 uncategorized respondents). Three dimensions of structure (i.e., formalization, vertical participation, and

horizontal participation), and technology (i.e., variability, instability, and uncertainty) were assessed. Uncertainty and job satisfaction were measured using the Environmental Uncertainty Scale and the MMSS, respectively. Reliability and validity were reported as acceptable for all study instruments. Findings revealed moderate levels of overall job satisfaction. Greater vertical and horizontal participation were strongly correlated with higher levels of job satisfaction, and greater formalization was moderately related to lower levels of job satisfaction. Technology and environmental uncertainty were not significantly related to job satisfaction. Years of experience with the public health department depicted a low positive relationship with job satisfaction. During multiple regression analysis, structure emerged as the critical predictor of job satisfaction, accounting for 41% of the explained variance. The authors emphasized the importance of creating more flexible work environments and facilitating staff involvement in decision-making in relation to the job satisfaction of public health nurses.

Prior to the implementation of hospital re-engineering, Brown et al. (1999) investigated the influence of key work and personal attributes on the stress levels and job satisfaction of hospital workers (N = 654) in a large teaching hospital in Ontario. The Job Characteristics Scales assessed aspects of the work environment (i.e., interference, decision-latitude, role clarity, demands, influence, co-worker support, supervisory support, teamwork, job security, job

satisfaction, and family interference). Information was also collected on demographic variables (e.g., age, gender, weekly hours spent on job activities, etc.) and personal characteristics (i.e., active coping style, readiness for organizational change and self-efficacy). Findings revealed that all levels of workers (i.e., designated and non-designated supervisors, and staff) were very satisfied with their jobs, and experienced moderate stress levels. Higher levels of job stress were also significantly associated with lower levels of job satisfaction. For all groups, the greatest predictor of higher job satisfaction was greater coworker support, which accounted for up to 23% of the explained variance. For staff, additional predictors of greater job satisfaction included increased decision latitude, increased role clarity, and greater supervisory support. For non-designated supervisors, less job demands and increased decision latitude were predictive of greater satisfaction. Lastly, for supervisors, younger age and less job influence were predictive of greater job satisfaction.

Luthans and Sommer (1999) explored the effects of select personal characteristics (i.e., age, gender, marital status, and job tenure) on the job satisfaction of health care managers and front-line employees (N = 848) working in a rehabilitation hospital after the implementation of major downsizing initiatives. Study results suggested that managers and employees who were older and had longer tenures were more satisfied with their jobs than those who were younger and had shorter tenures. A higher level of job satisfaction was

moderately to strongly correlated with other work attitude factors (i.e., greater organizational commitment, supervisory support, and work group trust).

In a group of acute care personnel (i.e., front-line, supervisory, and non-supervisory) (N = 380), Woodward et al. (2000) explored the predictive power of select job and personal characteristics on levels of job satisfaction. Levels of job satisfaction two years prior to the initiation of re-engineering processes accounted for 17.1% of the explained variance in existing levels of job satisfaction in front-line workers. Several job-related and work-environment factors (i.e., prior levels of supervisory support, increasing supervisory support, prior levels of role clarity, increasing role clarity, prior levels of family interference, less formal education, increasing teamwork, and job influence) accounted for an additional 25.3% of the explained variance. In comparison, prior levels of job satisfaction, increasing teamwork, and decision latitude over time were significant predictors of higher levels of job satisfaction for non-designated supervisors, accounting for 38.8% of the explained variance. Prior levels of job satisfaction and increasing teamwork were predictive of greater job satisfaction for supervisors, contributing 35.7% of the explained variance.

Rout (2000) used survey data from a random sample of health care providers in northwest England to identify the greatest predictors of job satisfaction in a subset of district nurses (n = 79). Job satisfaction was measured with the Job Satisfaction Scale and job stress was assessed using a

researcher-developed scale. District nurses were most satisfied with coworkers and the amount of job variety, and least satisfied with relations between managers and coworkers and promotion opportunities. The greatest job stressors included time pressure, administrative responsibility, having too many things to do, not having direct control, interruptions, keeping up with organizational change, dealing with terminally ill patients and their relatives, taking work home, and lack of resources. During regression analysis, four stressor factors combined to explain 31% of the variance in satisfaction levels (i.e., high job demands, lack of communication, work environment, and career development). Conversely, fewer patient problems were predictive of high levels of job satisfaction. The researchers noted the limited generalizability of study findings due to the small sample size.

Summary. Study findings suggest that job satisfaction, as a multidimensional concept, is influenced by many job-related and work environment factors, which fluctuate across different practice settings. The results of many of the studies were consistent with the meta-analytic findings of Blegen (1993) and Irvine and Evans (1995) in identifying job-related and work environment factors (e.g., stress, supportive structures, autonomy, interaction/communication, job importance, etc.) as having moderate to strong relationships with job satisfaction.

Organizational Commitment and Behavioural Intentions

Within the theoretical and empirical literature, there are a number of disparate but similar conceptualizations of organizational commitment. As a theoretical construct, the components of commitment have been identified as behavioural, attitudinal, or a combination of both. The most prominent definition depicts organizational commitment as a unidimensional concept composed of both attitudinal and behavioural components (Mowday, Porter, & Steers, 1982; Price & Mueller, 1981; Weisman, Alexander, & Chase, 1981). Mowday et al. (1982) defined commitment as the strength of an individual's attachment to and involvement in a particular organization. It is reflective of the degree to which the individual accepts organizational goals and values, is willing to direct efforts toward achieving organizational success (i.e., attitudinal component), and intends to remain or stay (i.e., behavioural intention) with the organization.

Concurrent and successive causal models of turnover delineated attitudinal commitment and behavioural intentions as conceptually distinct variables in the turnover process (Curry et al., 1985; Mobley, 1982; Mobley et al., 1979; Mueller & Price, 1990; Price & Mueller, 1986). This conceptual distinction is depicted in the causal model of nurses' voluntary turnover behaviour by Mueller and Price. In this model, commitment (i.e., attitude), defined as loyalty to the organization, and intent to leave (i.e., behaviour), the perception of terminating employment in an organization, were both viewed as individualistic

and subjective in nature. This model also depicted commitment as a highly subjective, mediating variable that precedes intent to stay in influencing turnover behaviour.

It has recently been argued that organizational restructuring has concurrently influenced the nature of the workplace and employee-employer relationships. In recognizing the effects of massive organizational change, Meyer et al. (1997) defined commitment as a multidimensional construct with three interactive (attitudinal) components, which influence a person's intent to remain (behavioural) with the organization. Affective commitment is described as emotional affinity for the organization, as well as identification with, and involvement in, the organization. It is manifested in one's level of comfort, worthiness, and feelings of competence within the organization. Normative commitment is characterized by a moral imperative to remain with the organization, usually created by a felt need to repay the organization for benefits received (i.e., training). Continuance commitment represents the perceived costs of terminating employment and is affected by the value placed on benefits (i.e., status and medical coverage) provided by the organization. The authors propose that these three components ultimately link the employee to the organization and substantially lessen intentions to leave. While affective and normative commitment represent the attitudinal component of commitment, continuance commitment is comparable to the intent to stay/leave concept.

Organizational commitment. Numerous authors (e.g., Mathieu & Zajac, 1990; Mowday et al., 1982; Mueller & Price, 1990; Parasuraman, 1989; Price & Mueller, 1986) have established support for the strong effects of determinants (i.e., job-related and work-environment components) on organizational commitment. The same authors reported that personal characteristics had very little effect on commitment.

One meta-analytic study of 174 independent studies examined the antecedents and correlates of organizational commitment (Mathieu & Zajac, 1990). The antecedent variables consisted of personal characteristics, organizational and job characteristics, group/leader relations, and role states (i.e., ambiguity, conflict, and overload). Findings demonstrated moderate to high positive correlations between most job characteristics (i.e., skill variety, job challenge, and job scope, respectively) and organizational commitment, with task autonomy being the only exception. Generally, group-leader relations variables were low to moderately, positively correlated with commitment. The only exception was leader communication, which depicted a high, positive correlation. Organizational characteristics, such as size and centralization were found to only have a small, negative correlation with commitment. All of the role state variables were moderately and negatively correlated with commitment. Lastly, several personal characteristics (i.e., marital status, salary, job level, position and organizational tenure, and ability) demonstrated small, positive correlations with

commitment. The exceptions were gender and education. Moderate to high positive correlations were found between age, work ethic, and perceived personal competency and organizational commitment.

Empirical support exists as well for the positive relationships among work-related attitudes, including job satisfaction and organizational commitment (e.g., Blegen, 1993; Corser, 1998; Mathieu & Zajac, 1990; Mowday et al., 1982; Mueller & Price, 1990; Parasuraman, 1989; Price & Mueller, 1986, etc.). Also, Turnley and Feldman (1998, 1999) found support for the negative impact of psychological contract violation on managers' commitment to their business organizations, especially during periods of extensive restructuring. Two meta-analytic studies (Blegen; Mathieu & Zajac) and one review of the health-related research literature (Corser) were identified that examined some of these relationships.

In a meta-analysis of studies conducted with nurses, Blegen (1993) revealed there was a strong, positive correlation between job satisfaction and organizational commitment. Corser (1998), in reviewing research studies involving acute care nurses and other providers, found high levels of organizational commitment were consistently and significantly associated with higher levels of job satisfaction. In addition, Mathieu and Zajac (1990) explored the influence of other correlates or covariates (i.e., internal and overall motivation, job involvement, stress, occupational and union commitment, overall

job satisfaction, and degree of satisfaction with intrinsic and extrinsic rewards, supervision, promotion, pay, coworkers, and the work itself) on organizational commitment. The findings indicated that higher internal and overall motivation, greater job involvement, occupational commitment, overall job satisfaction, and satisfaction with supervision were strongly associated with greater organizational commitment. Further, less stress, greater satisfaction with coworker relations, greater promotion opportunities, and higher pay depicted moderate correlations with greater organizational commitment.

Mathieu and Zajac (1990) went on to examine the effects of organizational commitment on employees. Higher job performance and greater attendance were associated with greater commitment, but the relationships were low. Low to moderate correlations were also observed between greater commitment and less perceived job alternatives, less work-related tardiness, and lower turnover. The strongest correlations were observed between greater commitment and less intent to search or leave. Support for the significant association between organizational commitment and select outcomes is also found in the health care literature. Corser (1998), in a review of the health care literature, noted documentation of significant relationships between higher levels of commitment and greater job satisfaction and job performance, fewer incidents of job tardiness, less job strain and burnout, and lower turnover rates.

In a comprehensive survey of first-line nurse managers (N = 200) working in acute care hospitals in British Columbia, Acorn et al. (1997) investigated the effects of select factors on organizational commitment. The findings indicated that nurse managers working in extremely decentralized organizations reported higher levels of organizational commitment than their counterparts in less decentralized systems. During path analysis, higher degrees of decentralization and greater job satisfaction were associated with greater organizational commitment. Job satisfaction was found to have a direct, positive effect on organizational commitment. Of particular significance was the finding that decentralization and job satisfaction combined to explain 44% of the variance in organizational commitment.

Other research studies examined the effect of job-related and personal characteristics on commitment. Lee and Henderson (1996) explored the relationship between occupational stress and organizational commitment, as well the influence of personal and organizational factors in a group of nurse administrators (N = 78). The Maslach Burnout Inventory measured occupational stress, or burnout (i.e., depersonalization, personal accomplishment, emotional exhaustion) and the OCQ assessed levels of organizational commitment (i.e., intent to stay). The findings demonstrated that all burnout scores were significantly and inversely related to commitment scores. There was no significant correlation between depersonalization scores on the burnout inventory

and any personal or organizational variables. However, higher levels of organizational commitment were significantly associated with greater feelings of personal accomplishment, greater colleague support, and lower levels of depersonalization, emotional exhaustion, and overall burnout.

McNeese-Smith (1997) examined the perceived influence of the behaviours of nurse managers on staff nurses' (N = 30) organizational commitment during implementation of managed care in a teaching hospital. Through content analysis, several managerial behaviors (e.g., visionary, positive influence, open communication, role model, education focus, supportive, etc.) were identified as exerting a positive effect on perceived levels of organizational commitment. Conversely, feelings of being unappreciated and unsupported by managers contributed to lower levels of commitment. Unresolved unit issues, lack of communication, and a general mistrust of management were other contributing factors in nurses' perceived lack of commitment.

As well, using a sample of managers and front-line employees, Luthans and Sommer (1999) examined the effects of select personal characteristics (i.e., job tenure, age, gender, and marital status) on organizational commitment. Findings revealed that older and longer-tenured employees were more committed to their organizations than younger and less tenured employees. The personal attributes of being married and female were also associated with higher levels of organizational commitment. Moderate to strong, positive correlations

were demonstrated as well between work-related attitude variables (i.e., job satisfaction, managerial support, and group trust) and organizational commitment.

Ingersoll et al. (2000) used a longitudinal, prospective study design in a sample of staff (n = 535) and managers (n = 120) to explore the relationships among organizational culture, commitment, and readiness. Staff, of which most (80.3%) worked in the nursing department, were employed in two tertiary care hospitals during a time when a patient-focussed delivery system was being implemented. Organizational culture was evaluated along three dimensions (i.e., constructive, passive/ defensive, and aggressive/defensive) using the Organizational Culture Inventory. Two subscales of the Pasmore Sociotechnical Systems Assessment Survey (i.e., Commitment/Energy and Innovativeness and Cooperation) were used to evaluate organizational commitment and readiness. Strong internal consistency was reported for each of the scales. Findings demonstrated that constructive organizational climates were moderately correlated with higher levels of organizational commitment, while passive/ defensive and aggressive/defensive organizational climates were moderately associated with lower levels of organizational commitment. In addition, greater readiness for organizational change was moderately correlated with greater commitment. Regression analysis revealed that the best predictor of greater organizational commitment was greater perceived organizational readiness,

followed by constructive culture. An additional significant predictor was passive/defensive culture. The researchers inferred that in order to facilitate more positive perceptions of organizational commitment, managers need to direct more energy and effort into building more constructive or empowering environments for nurses.

In a random sample of RNs (N = 412), Laschinger et al. (2000) examined the influence of workplace empowerment (i.e., formal and informal power, and access to empowerment structures) and organizational trust on continuance and affective commitment following major downsizing/restructuring of tertiary care hospitals. Greater trust in management was strongly associated with higher affective commitment. Further, perceived access to greater empowering structures was moderately associated with affective commitment. During path analysis, empowerment was shown to have a direct positive effect, as well as an indirect effect through organizational trust, on affective commitment. Lastly, greater empowerment and greater organizational trust combined to explain 28% of the variance in affective commitment.

In summary, organizational commitment is recognized as an important outcome which has implications for health care organizations and nurses. There appears to be consensus that job-related and work environment variables have stronger relationships with commitment than personal characteristics. As well,

job satisfaction demonstrates a consistent, positive relationship with organizational commitment.

Intent to stay. As a concept, intent to stay has been defined by some authors as the propensity for an individual to stay with an employing organization (Cavanagh, 1990; Yoder, 1995). While many researchers use single-item measures of intent to stay, multi-dimensional tools may be used to explore this concept in more depth (e.g., Turnley & Feldman, 1998, etc.). Through the work of other researchers, support has been gained for the effects of personal (e.g., training, education, kinship responsibilities, etc.) and job (e.g., alternative work, pay, promotion opportunity, etc.) characteristics on intent to stay (Curry et al., 1985; Mueller & Price, 1990; Price & Mueller, 1981, 1986). However, there are studies where no support exists for the direct effect of antecedent variables on intent to leave (e.g., Parasuraman, 1989).

The causal process between job satisfaction, organizational commitment, and intent to stay in predicting turnover is well supported in the research literature. Most of the empirical and theoretical literature support intent to stay/leave as the best predictor of voluntary turnover behaviour in nurses (Borda & Norman, 1997; Cavanagh, 1990; Irvine & Evans, 1995; Mueller & Price, 1990; Parasuraman, 1989). Empirical support also exists for the direct effect of commitment on intent to stay (Mathieu & Zajac, 1990; Meyer & Allen, 1997; Mueller & Price; Parasuraman; Price & Mueller, 1986). Less support is evident

for the direct effect of commitment on turnover behaviour (Mueller & Price; Parasuraman; Price & Mueller). There is also evidence that intent to stay/leave is influenced by perceived psychological contract violation. Higher perceived contract violation has been associated with greater intentions of leaving an employer (Robinson & Rousseau, 1994; Turnley & Feldman, 1998, 1999). Further support was found for the mediating effects of select situational factors (e.g., alternate job availability, procedural justice in relation to layoff procedures, etc.).

Irvine and Evans (1995) conducted a meta-analysis of studies which explored the relationships among job satisfaction, behavioural intentions (i.e., intent to stay/leave), and nurse turnover behaviour. Findings supported a strong, negative relationship between job satisfaction and behavioural intentions but a strong, positive relationship between nurses' behavioural intentions and turnover. Only a small, negative relationship was evident between job satisfaction and turnover, which demonstrated that behavioural intentions mediated the effect of job satisfaction on turnover.

Hastings and Waltz (1995) also explored the predictive power of select aspects of the job and work environment for intent to leave in a study of staff nurses working in organizations (i.e., University Hospital Cancer Center and Shock Trauma Center). Data were collected before and after the implementation of a professional practice model using researcher-developed instruments. Job

satisfaction was measured with the McCloskey-Mueller Satisfaction Scale (MMSS) and the Hackman-Oldman General Job Satisfaction (GJS) scale and turnover intent was assessed using the Michigan Organizational Assessment Questionnaire. The Partnership Perception Scale measured partnership functioning and attitudes towards the quality of care. Through regression analysis, it was demonstrated that 35% of the variance in intent to leave was explained by three satisfaction components of the MMSS (i.e., satisfaction with control/responsibility, praise/recognition, and scheduling) and ability to give high quality care.

In a random sample of RNs (N = 412), Laschinger et al. (2000) investigated the effects of workplace empowerment (i.e., formal/informal power and access to empowerment structures) and organizational trust on continuance commitment after the initiation of major downsizing and restructuring initiatives in acute care hospitals. Path analysis revealed that the greatest contributor to overall empowerment was access to empowerment. Empowerment was not found to exert a direct effect on continuance commitment, but rather exerted an indirect effect through organizational structure. Additionally, only 4% of the variance in continuance commitment was explained by organizational trust.

Using a sample of RNs (N = 241), Shader, Broome, Broome, West, and Nash (2001) sought to investigate the best predictors of anticipated turnover. The findings showed that higher anticipated turnover demonstrated low to

moderate correlations with increased work stress, more stable scheduling, actual turnover, lower levels of job satisfaction, and decreased levels of group cohesion. Regression analysis revealed that four variables (i.e., job stress, group cohesion, work satisfaction, and weekend overtime) combined to explain 31% of the variance in anticipated turnover. Using different age ranges, additional regression equations were generated. While work satisfaction remained a constant predictor for most age groups (i.e., except in ≥51 years), job stress emerged as a significant predictor for younger nurses (i.e., 20 to 30 years) and group cohesion for older nurses (i.e., 40 to 51 years).

The preceding studies support how attitudinal variables, such as job satisfaction and organizational commitment, exert a direct influence on intent to stay, while personal and situational variables (e.g., age, years experience, job stress, level of autonomy, work environment, workload, etc.) influence nurses' intentions in a more indirect manner. It is important to recognize the influence of turnover on employee and group morale, as well as on the success of health care organizations in maintaining quality care. Further investigation into factors affecting nurses' intent to stay with their employing organizations, as well as the impact of health care reform on intent to stay and turnover, is needed.

Summary

This section has provided insight into some of the factors thought to influence work-related attitudes (i.e., psychological contract violation, job satisfaction, and organizational commitment) and behavioural intentions (i.e., intent to stay/leave). While there is evidence to support the strong effects of job-related factors and work environment factors on employees' attitudes and behaviours, there are multiple factors proposed to have separate and interactive effects on provider outcomes. More research is needed to more clearly understand the factors influencing nurse outcomes in light of major health care restructuring initiatives.

Discussion

Health care reform initiatives, such as regionalization, downsizing, and re-engineering, have been utilized extensively in the Canadian health care system in a move to improve effectiveness and reduce inefficiencies. It is conjectured that nurses, the largest group of health care providers, will be most affected by these reforms. Research findings suggest that system changes have had both positive and negative repercussions for nurses across all practice settings. Some research studies have reported on the negative outcomes of reforms (e.g., greater anxiety and uncertainty, greater perceived stress, insecurity, loss of trust, decreased job satisfaction, greater burnout, decreased productivity, etc.), while

others have identified positive outcomes (e.g., greater autonomy, new and challenging roles, more staff and client involvement in decision-making, greater community involvement, better interdisciplinary approaches to care, greater staff empowerment, etc.).

The review of the literature highlighted the complex nature of provider outcomes and the multiple factors influencing them. The variant conceptualizations and operational measures of provider outcomes (i.e., job satisfaction, organizational commitment, and intent to stay) makes meaningful cross-study comparisons more difficult. Despite these inconsistencies, the empirical data suggest that multiple factors (i.e., job-related, work environment, and personal characteristics) exert separate and interactive effects on most provider outcomes. Furthermore, research findings suggest that contextual factors (i.e., job-related and work environment) have a much stronger influence on provider outcomes than personal factors.

While there is some empirical support for the role played by psychological contracts in the business work environment, there is limited evidence on the importance of specific job-related and work environment factors for increasing or decreasing perceived contract violation. Nevertheless, there are indications that more extensive restructuring and perceptions of employer control over significant changes may very well increase perceived contract violation. Significantly, no studies were identified that addressed the nature and importance of

psychological contracts and the conditions for their violation, as well as the consequences, in the health care field.

Given the predicted nursing shortage and ever-changing work environments, it is imperative that health care organizations develop a greater understanding of the potential implications of system changes for all providers. More research is needed to examine the major premises of integrated causal models of nursing turnover, and to determine the importance of specific job-related and work environment factors in the aftermath of major restructuring initiatives. This is particularly important as there has been limited research efforts directed towards examining the impact of health care reform on provider groups.

Conceptual Model

A number of theoretical perspectives and conceptual models have been suggested to explain turnover behaviour. Besides the broader conceptualizations, there are causal models of turnover behaviour for nurses working in a variety of workplace settings (Mueller & Price, 1990; Price & Mueller, 1981, 1986). The Price and Mueller (1981, 1986) causal model has been tested with nurses, either in whole or part, by several authors (e.g., Curry et al., 1985; Irvine & Evans, 1995; Price & Mueller, etc.).

The revised integrated causal model developed by Mueller and Price (1990) incorporates economic, psychological, and sociological factors as determinants of nurse turnover behaviour. This integrated model is comprised of three variable clusters: causal, intervening, and outcome. Causal variables or determinants refer to structural aspects of the work setting (i.e., pay, routinization, autonomy, feedback, work group cohesion, work load, and task identity), environmental constraints (i.e., nurses' wait list, kinship responsibility, community participation, and perceived job opportunities), and employee characteristics (i.e., general training, work motivation, professionalism, leaving plans, publicity-friends, violation range, violation-external, and explicitness). Intervening variables include psychological contract violation (i.e., perceived breach of expected rewards), job satisfaction (i.e., degree of contentment), and organizational commitment (i.e., loyalty and attachment). Intent to stay (i.e., likelihood of staying) is the end outcome variable.

According to this model, job satisfaction, organizational commitment and intent to stay intervene between causal variables and organizational turnover (Mueller & Price, 1990). Thus, each intervening variable is also treated as a dependent variable or intermediate outcome. The integrated model depicts each intervening variable as a dependent variable or intermediate outcome in the process of turnover. In addition to causal and intervening variables, the model accounts for the possible direct effects of correlates (i.e, demographic/work-

related characteristics) on satisfaction, commitment, and intent to stay. The causal sequencing of the model demonstrates job satisfaction as exerting a stronger influence on commitment than either intent to stay or turnover. Further, commitment is viewed as the direct causal link with intent to stay, and only influences turnover indirectly through intent to stay.

In addition to the causal models of turnover behaviour, interest has been increasing on the effects of restructuring on perceived psychological contracts. While it has been acknowledged that employee contracts have changed as a result of restructuring efforts, not all of these changes have been encouraging (Morrison & Robinson, 1997; Robinson & Rousseau, 1994; Robinson et al., 1994; Turnley & Feldman, 1998, 1999). In reality, many are concerned with the potential negative impact of perceived contract violation on employees' satisfaction, commitment to their employing organization, and intentions of staying or leaving.

Turnley and Feldman (1998, 1999) proposed a framework that illustrates the interrelationships among psychological contract violation, situational moderators (i.e., availability of attractive employment alternatives; procedural justice during layoffs, pay raises, and promotional decisions; likelihood of future violation; quality of supervisory relationships; and quality of relationships with colleagues), and consequences (i.e., exit, voice, loyalty, and neglect) of perceived violation. This linear model proposed that employees respond to

psychological contract violation by increasing exit behaviours and voiced objections to upper management, and decreasing loyalty to the organization and neglecting in-role responsibilities. The model also proposed that situational moderators buffer the impact of perceived violation on selected behavioural outcomes.

A modification of the integrated model of turnover (Mueller & Price,1990) and the model of psychological contract violation (Turnley & Feldman, 1998, 1999) was developed by Way, Gregory, Barrett, and Parfrey (1999) to provide the framework for the overall longitudinal study (see Figure 1). The Conceptual Model of Behavioural Intentions (CMBI) is designed to represent the conceptual links among determinants, covariates or intermediate outcomes, and behavioural intentions. That is, determinants exert a separate and interactive effect on the intermediate outcomes and behavioural intentions. Each intermediate outcome directly influences the other and exerts an indirect effect through each successive outcome. As well, each intermediate outcome exerts a separate and interactive effect on behavioural intentions. Finally, correlates or personal characteristics influence behavioural intentions directly and indirectly through determinants and intermediate outcomes.

Definitions

The following sections outline the major components and definitions of the conceptual model for the current study (i.e., CMBI).

Determinants. The determinants selected for investigation in the current study were limited to the overall perceptions of the impact of health care reform. More specifically, the determinants included perceptions of the importance of reforms and other job-related and work environment factors (i.e., emotional climate of the workplace, practice-related issues, quality of care, safety concerns, and standards of care) (Way, 1995).

Correlates. The correlates represented key personal characteristics (i.e., age, gender, education, region of workplace, area of responsibility, current position, years experience, current position tenure, and employment status) which could potentially explain variations in nurses' perceptions of the impact of health care reform, work-related attitudes, and behavioural intentions. Many of these characteristics are consistent with those used in previous research on work-related attitudes (Blegen, 1993; Irvine & Evans, 1995; Mathieu & Zajac, 1990; Mowday et al., 1982; Mueller & Price, 1990; Price & Mueller, 1981, 1986; Turnley & Feldman, 1999; Woodward et al., 2000).

Intermediate outcomes. For the current study, intermediate outcomes (i.e., psychological contract violation, restructuring satisfaction, general job satisfaction, and organizational commitment) were defined by the work of several

researchers. A psychological contract is defined as a belief in the existence of an implicit, reciprocal agreement established between two parties, usually an employer and an employee, that is continuous and long-term (Rousseau, 1989, 1990). The basic principle of psychological contracts involves the employee expectation of employer obligations to them (e.g., job security, fair wages, appreciation, etc.) in exchange for positive employee performance (e.g., hard work, loyalty, etc.) (Robinson & Rousseau, 1994; Rousseau, 1989). Perceived psychological contract violation occurs when an organization fails to respond to an employee's contribution in the way a person believes the employer is obligated to do so (Robinson & Rousseau). It is also thought that psychological contract violation influences both employee attitudes and behaviours, and often leads to strong emotional and affective states, which have negative implications for the employment relationship (Morrison & Robinson, 1997; Rousseau, 1989).

Restructuring satisfaction, for the purpose of the current study, pertains to an employee's satisfaction with overall health care system reform and quantifies an employee's satisfaction with managerial support and interdisciplinary relations (Way, 1999). The staff-supervisory relationship is an integral part of job satisfaction scales (e.g., MMSS, JSS, etc.). As a job-related or work environment factor, relations with supervisors has been shown to depict moderate to strong associations with overall job satisfaction (Blegen, 1993; Irvine & Evans, 1995).

General job satisfaction has been identified as a major component in casual models of nursing turnover behaviour. Broadly, it is defined as an employee's overall propensity for the job (Price & Mueller, 1986).

Organizational commitment is defined as an attitude, which reflects an employee's relationship with, and involvement in, the employing organization (Mowday et al., 1979). The strength of this relationship is dependent on the employee's belief in the organization's goals and values, willingness to expend extra effort to meet organizational goals, and propensity to remain with the employing organization.

Behavioural intentions. As an outcome variable for the current study, intent to stay is defined as an employee's perception of the likelihood of staying with the employing organization (Turnley & Feldman, 1999). These researchers define an employee's intention of staying with the employing organization by demonstrated or anticipated job search behaviours.

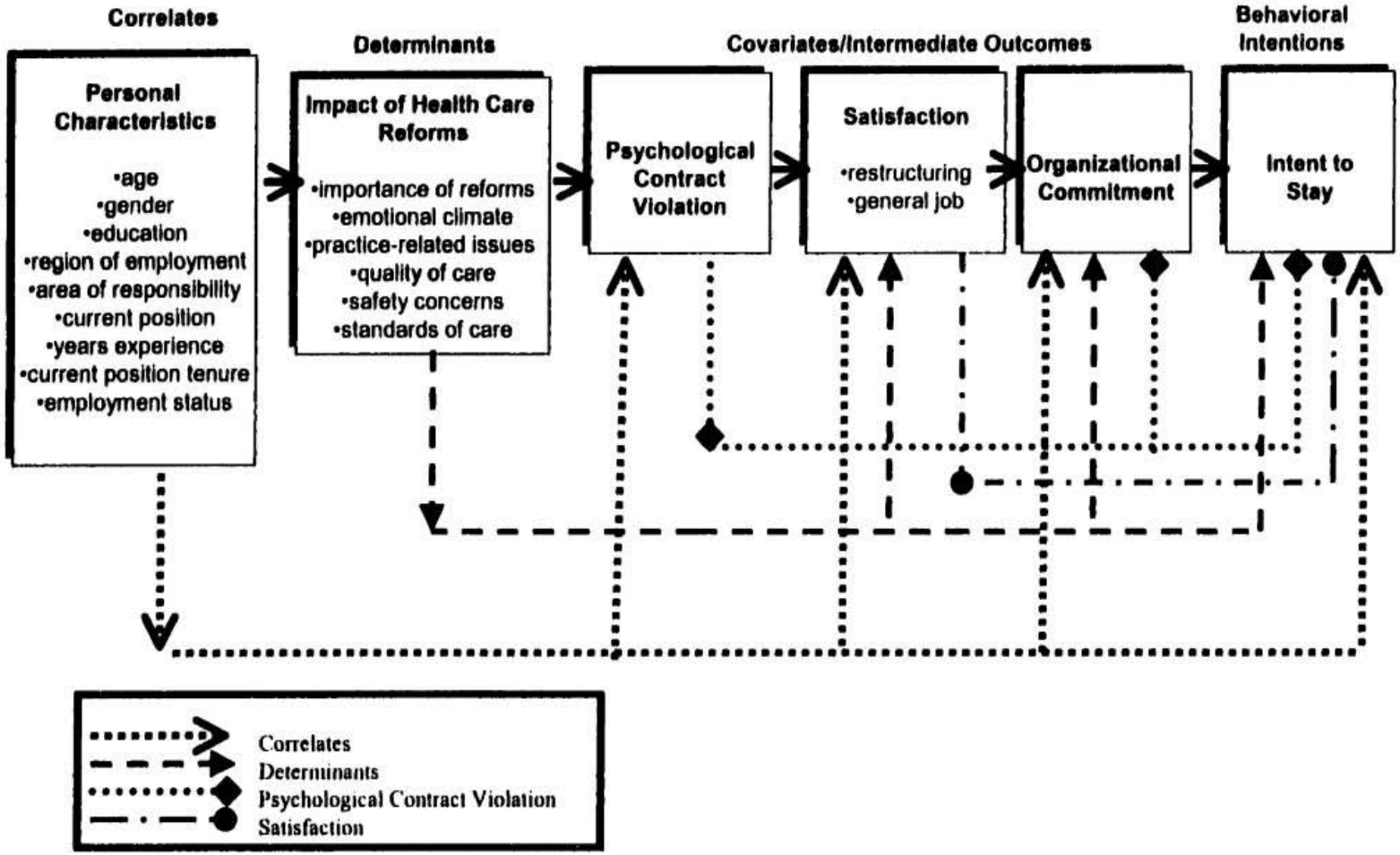

Figure 1: Conceptual Model of Behavioral Intentions

Source: Way, C., Gregory, D., Barrett, B., & Parfrey, P. (1999). Conceptual Model of Behavioural Intentions. St. John's: Memorial University of Newfoundland Faculty of Medicine.

CHAPTER 3

Methodology

This chapter provides a discussion of the research design, the study population, the recruitment of the sample and the study procedure. The Employee Attitudes Survey (EAS) was used for data collection. The EAS is comprised of a General Information sheet and six scales: Organizational Commitment Questionnaire (OCQ), Psychological Contract Violation (PCV) scale, Intent to Stay (IS) scale, General Job Satisfaction (GJS) scale, Restructuring Satisfaction (RS) scale, and Revised Impact of Health Care Reform Scale (RIHCRS). A brief overview is presented on each section of the survey instrument, as well as reliability and validity findings. The ethical considerations of the study and the statistical data analyses used to answer the research questions are also presented.

Research Design

A descriptive, correlational design was used to evaluate nurses' perceptions of health care reforms and their attitudes toward the work environment and employing organizations four years after the introduction of major restructuring initiatives. Nurses who were previously surveyed by the Association of Registered Nurses of Newfoundland and Labrador (ARNNL) (Way, 1995) were again selected to monitor changes in their perceptions of the

impact of health care reform. The relationships among demographics and key study variables (i.e., impact of health care reforms, general job satisfaction, restructuring satisfaction, psychological contract violation, organizational commitment, and intent to stay) were also examined.

Population and Sample

The target population was all RNs currently working in direct care, administration, and/or education from all health care regions of the province of Newfoundland and Labrador. In order to compare nurses' perceptions of health care reform measures over time, the accessible population was restricted to those RNs who were currently registered and practising within Newfoundland and Labrador and who had participated in a 1995 survey commissioned by the ARNNL.

The original survey (Way, 1995) was used to gather baseline data on RNs' perceptions of health care reform initiatives during regionalization of health services (but prior to managerial restructuring). The sample for the 1995 study was a proportional stratified random sample of RNs working in all health sectors in six regions of the province generated from the accessible population (i.e., those whose names appeared on the most current mailing list of the ARNNL, and who agreed to participate in research; $N = 3,982$). To ensure that the number of subjects selected was proportional to the size of each stratum in the

total accessible population, a weighting factor was used. Based on these calculations, 368 respondents were required to enable generalization of the study results to the total population of nurses with 95 percent confidence. The desired sample size was increased by 100 percent per region to bring the total number of potential participants to 736, of which 333 nurses responded.

For the current study, questionnaires were sent to all respondents in the original study who met the criteria of being currently licensed and working in the province (N = 290). Of these, 181 respondents completed the survey for a response rate of 62.4%.

Procedure

To facilitate data collection, telephone contact was made with the ARNNL to gain support and permission to access the list of participants from the 1995 study. A cross reference and comparison of the 1995 list of participants and the most current 1999 nurses registration list (generated by the ARNNL) was conducted to determine the exact number of participants of the 1995 study who were continuing to practising in Newfoundland and Labrador.

Data were collected from early June to mid-July 1999. Questionnaires, accompanied by a cover letter explaining the study and the value of participation, were mailed out to potential subjects in the first week of June (see Appendix A). A pre-addressed, stamped return envelope was enclosed with the questionnaire

package to encourage potential participants to respond. Follow-up reminder letters were sent to potential study subjects two weeks after the initial mail-out (see Appendix B). Termination of data collection occurred in mid-July with a total of 182 returned questionnaires. One questionnaire was deemed unusable due to missing data. The total number of usable questionnaires for analysis was 181.

Instruments

The Employee Attitudes Survey (EAS) consisted of a descriptive profile and six work-related scales: Revised Impact of Health Care Reform Scale (RIHCRS), Psychological Contract Violation (PCV) scale, Restructuring Satisfaction (RS) scale, General Job Satisfaction (GJS) scale, Organizational Commitment Questionnaire (OC), and Intent to Stay (IS) scale (see Appendix A). The following is a brief overview of each component of the survey instrument, including details of reliability and validity.

General Information

A ten-item General Information section was used to gather data on both personal/demographic (i.e., geographic region, education, gender, and age) and work-related (i.e, occupation, primary area of responsibility, nature of

employment, position, total years experience, and total years in current position) variables which could otherwise account for variations in nurses' responses.

Organizational Commitment Questionnaire (OCQ)

Organizational commitment was measured with the 9-item version of the Organizational Commitment Questionnaire (OCQ) developed by Mowday, Steers, and Porter (1979). It is designed to assess employees' overall commitment to an organization on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Possible scores range from 9 to 63, with higher scores illustrating greater organizational commitment. Both the15- and 9-item scales have been used extensively in studies with health care providers, including nurses, and has a consistently high internal consistency (α = .84 to .90).

Psychological Contract Violation (PCV) Scale

Psychological contract violation was measured using the Psychological Contract Violation Scale (PCV) (Turnley & Feldman, 1998), which assesses both transactional (i.e., extrinsic) and relational (i.e., intrinsic) components of psychological contracts. This 4-item scale uses a 5-point rating scale ranging from 1 (*very poorly fulfilled, very infrequently, much less than promised*, or *much less than it should*) to 5 (*very well fulfilled, very frequently, much more than*

promised, or *much more than it should*). Possible score ranges from 4 to 20, with higher scores representing lower degrees of perceived contract violation. One negatively worded item was reverse-scored prior to data entry. Turnley and Feldman (1998) reported high internal consistency (α = .86) for the PCV Scale in a sample of managers and executive-level personnel (N = 541). To the author's knowledge, this is the first testing of this scale with health care personnel.

Intent to Stay (IS) Scale

The Intent to Stay (IS) scale is adapted from the 5-item Intent to Quit and Job Search Scales (Turnley & Feldman,1998). The 3-item version used in this study assesses likelihood of staying with a present employer, potential for leaving if another job opportunity presents itself, and search efforts for another job. Items were ranked on a five-point scale, ranging from 1 (*very unlikely/infrequently)* to 5 (*very likely/frequently*). Possible scores for this score range from 3 to 15, with higher scores indicating an increased likelihood of remaining with the current employer. Two negatively worded items were reverse scored prior to data entry. When used in a sample of managers and executive-level personnel (N = 541), a high internal consistency was reported (α = .92).

General Job Satisfaction (GJS) Scale

Three of the five items of the General Job Satisfaction (GJS) scale of the

78-item Job Diagnostic Survey (Hackman & Oldham, 1975) were used to measure nurses' overall job satisfaction. The items are each ranked on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), with possible scores ranging from 3 to 21. Higher scores indicate greater levels of satisfaction. The GJS scale has been used extensively to explore job satisfaction in nursing populations, with reliability coefficients reported to be $\geq .76$.

Restructuring Satisfaction (RS) Scale

The 5-item Restructuring Satisfaction (RS) scale was developed by Way (1999) to measure nurses' satisfaction with managerial support and interdisciplinary relations in the health care system. It was used to rate nurses' satisfaction with downsizing and managerial changes in the health care system. Items are rated on a 6-point scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Potential scores range from 5 to 30, with higher scores denoting greater satisfaction with restructuring. This is also the first psychometric testing of this scale.

Revised Impact of Health Care Reform Scale (RIHCRS)

The RIHCRS (Way, 1999) is a modified version of the Impact of Health Care Reform (IHCR) scale (Way, 1995). It was used to measure nurses' perceptions of the impact of health care reform in six content domains (i.e.,

importance of reforms, emotional climate of the workplace, practice-related issues, quality of care, safety concerns, and standards of care). Respondents were asked to rate the 30 items on a 6-point Likert Scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Thirteen negatively worded items were reverse scored prior to data entry. The possible score range for the total scale is 30 to 180, with higher scores indicating more positive attitudes towards the impact of health care reform.

Way (1995) reported on the reliability and validity of the IHCR scale. The internal consistency of the subscales ranged from α = .61 to .79. High internal consistency was also obtained for the total scale (α =.87). Construct validity was supported by the strong, positive correlations between the subscales and total scale (range: r = .64 to .90), and exploratory and confirmatory factor analysis (i.e., 7-factor solution explained 59.3% of the total variance).

Pyne (1998) also reported on the reliability and validity of the original IHCR scale with a sample of 298 nurses. There was a high level of internal consistency (α = .83) reported for the total instrument. While the alpha coefficient for the importance of reform subscale was lower (α = .46), the alpha coefficients for the remaining four subscales ranged from .57 to .67, indicating moderate internal consistency (Polit & Hungler, 2000). Construct validity was supported by the statistically significant intercorrelations among the subscales

within a moderate range (r = .61) and the positive correlations between the subscales and the total scale (range: r = .61 to .77).

Ethical Considerations

Approval of the research project was granted by the Human Investigation Committee, Faculty of Medicine, Memorial University of Newfoundland (see Appendix C). Letters of support from key stakeholders were also obtained for the current study (see Appendix D). To maintain anonymity and confidentiality, questionnaires did not require the respondent to provide any form of identification. Return envelopes were number-coded to correspond with a master list of potential respondents (to allow tracking of non-respondents for follow-up reminder letters). Once returned, envelopes and questionnaires were promptly separated and stored in a locked area independent of each other and the master list to ensure anonymity. Only the researcher had access to the master list; the anonymous questionnaires were accessible only to the researcher and thesis supervisor.

Data Analysis

The Statistical Package for Social Sciences (SPSS) for Windows program was used to analyze the data. Descriptive statistics were utilized to assemble a profile of personal characteristics, and the distribution of subscales (i.e., RIHCR,

PCV, RS, GJS, OCQ, and IS scales), and total scale scores. Although the same group of nurses was surveyed in 1995 and 1999, it was not possible to match the responses of each participant between the two time periods (i.e., ARNN registration number not used as an identifier in the 1995 study). Therefore, the independent groups t-test was used to compare the results gathered from the two time periods. The strength and direction of relationships among study variables were established through use of the Pearson product-moment correlation coefficient (Pearson's *r*). One-way analysis of variance (ANOVA) and the t-test for independent groups were used to identify group differences for the total and subscale scores of the RIHCR and the PCV, GJS, RS, OCQ, and IS. The Bonferroni, a multiple comparison procedure, was used to identify differences in group means for ANOVA. This post hoc test was used to reduce the risk of making a Type I error, that is, rejecting a true null hypothesis (Polit & Hungler, 2000). A significance level of $\alpha = .05$ was set for the tests of association.

Stepwise multiple regression analysis, using a sequential or hierarchical approach based on the logic of the CMBI, was used to identify significant predictors of intermediate outcomes and behavioural intentions. Different combinations of predictor variables were used to identify the best regression model for each outcome variable.

Reliability and validity testing of instruments was also examined. Cronbach's alpha was used to assess internal consistency reliability of the RIHCRS, PCV, GJS, RS, OCQ, and IS. Intercorrelations among subscales and total scores were used to determine construct validity of all instruments. Results of these analyses are presented at the end of Chapter 4.

CHAPTER 4

Results

Study findings are presented in three sections. The first section presents sample characteristics and key study variables. The second section summarizes the relationships among variables, as well as the results of multiple regression analysis. The final section discusses the reliability and validity of the instruments based on study findings.

Sample Characteristics

This section presents an overview of study findings on personal characteristics. Descriptive findings are also presented on key study variables: perceptions of the impact of health care reforms and work-related variables (i.e., psychological contract violation, organizational commitment, job satisfaction, restructuring satisfaction, and intent to stay).

Personal Characteristics

Table 1 summarizes key characteristics of the 1999 (N = 181) and 1995 study samples (N = 333). For the 1999 study, the majority of respondents had a diploma level education (79.6%) and were primarily responsible for direct care (85.6%). A significant number of respondents were employed in the St. John's Region (47%), worked on a full-time permanent basis (72.4%), had 10 or more

Table 1

Description of the 1999 Sample (N = 181) and the 1995 Sample (N = 333)

	Current (June 1999)		ARNN[a] (1995)	
Characteristic	***n***	**%**	***n***	**%**
Education				
Diploma/certificate	144	79.6	276	82.9
BN or higher	37	20.4	57	17.1
Primary Area of Responsibility				
Direct Care	155	85.6	281	84.9
Administration	19	10.4	24	7.3
Other	7	4.0	26	7.9
Region				
St. John's	85	47.0	154	46.4
Eastern (Avalon/ Peninsulas)	28	15.5	48	14.4
Central	25	13.8	53	16.0
Western	27	14.9	42	12.7
Labrador/Northern	16	8.8	35	10.5
Employment Status				
Full-time	136	74.6	227	69.2
Part-time	31	17.7	52	15.9
Casual	14	7.7	49	14.9

[a] Sample size varies depending on number of missing values per category (Way, 1995).

Table 1 (cont'd)

Description of the 1999 Sample (N = 181) and the 1995 Sample (N = 333)

	Current (June 1999)		ARNN[a] (1995)	
Characteristic	***N***	**%**	***N***	**%**
Nursing Experience				
5 - 9 years	27	14.9	119	35.7
10 - 19 years	80	44.2	147	44.2
≥20 years	74	40.9	67	20.1
Years in Current Position				
≤4 years	52	28.7	130	39.2
5 - 9 years	43	23.8	127	38.3
≥10 years	86	47.5	75	22.5
Age				
23 - 29 years	11	6.1	80	24.0
30 - 45 years	124	68.5	195	58.6
≥ 46 years	46	25.4	58	17.4

[a] Sample size varies depending on number of missing values per category (Way, 1995).

years of nursing experience (85.1%), and held their current positions for 5 or more years (71.3%). Study subjects ranged in age from 27 to 57 years with a mean age of 40.5 years (SD ± 7.5).

The differences between the 1995 and 1999 samples on select characteristics (i.e., employment status, years in current position, years nursing experience, and age) is a function of both time (i.e., the current study taking place four years later), early retirements due to downsizing, and contract negotiations to convert a number of casual positions to regular full- and/or part-time positions in the province.

Impact of Health Care Reforms

The areas addressed under the RIHCRS included the importance of reforms, emotional climate of the workplace, practice-related issues, and concerns related to quality of care, safety, and standards of care. Table 2 presents the means, standard deviations, and weighted means for the total and subscale scores for the current 1999 sample.

The weighted mean score (M = 2.82) indicated that most nurses had negative attitudes toward the overall impact of health care reforms. The weighted mean scores for all of the subscales were in the negative range (i.e., < 3.5), with the exception of importance of reforms. Respondents were most negative about quality of care, followed by the emotional climate of the

Table 2

Mean and Standard Deviation Scores for the RIHCRS in 1999 (N = 181)[a]

Subscales	*M*	*SD*	Weighted[b] *M*	Range[c]
Importance of Reforms	16.5	3.91	4.13	1 - 6
Workplace Issues				
Emotional Climate	17.1	6.73	2.44	1 - 6
Practice-Related	11.21	4.73	2.8	1 - 6
Quality/Safety Concerns				
Quality of care	9	3.82	2.25	1 - 6
Safety concerns	14.15	4.53	2.83	1 - 6
Standards of care	10.09	3.71	2.52	1 - 6
Overall Impact of Reforms	84.53	19.04	2.82	1 - 6

Note. RIHCRS = Revised Impact of Health Care Reform Scale.

[a] Sample size is a function of missing data.

[b] Subscale scores were summed and divided by the number of items to generate a weighted mean for comparison purposes.

[c] The rating scale for all of the subscales ranged from a low of (1) to a high of (6), with a mean of 3.5.

workplace, standards of care, practice-related issues, and safety concerns, respectively.

Table 3 displays the weighted means for each subscale and overall scale score for both the current 1999 and the ARNN 1995 study samples. The results of the independent groups t-test are also presented. Although the same group of nurses was surveyed in 1995 and 1999, it was not possible to match the responses of each participant between the two time periods. The findings indicated that there was a statistically significant decline in the overall scale score and most subscale scores between the two time periods ($p < .001$). That is, nurses' were significantly more negative about the overall impact of reforms, the importance of reforms, the emotional climate of the workplace, practice-related issues, quality of care, safety concerns, and standards of care.

Importance of reforms. Study findings indicated that most respondents supported health care reforms ($M = 4.13$). The individual items comprising the scale provide meaningful insight into how nurses were viewing reforms. Over half of the respondents indicated that they understood the importance of downsizing/restructuring (52.8%), felt empowered to be active participants in affirming an important role for the profession (64.2%), and were cognizant of the challenges facing the nursing profession (88.9%). As well, many felt that current changes would increase consumer accountability/responsibility (78.1%).

Table 3

Comparison of 1999 and 1995 Reform Impact Results

Subscales	Current[a] (June 1999) Weighted (*M*)	ARNN[b] (1995) Weighted (*M*)	*t*
Importance of Reforms	4.13	4.31	2.10*
Workplace Issues			
Emotional Climate	2.44	3.02	6.10***
Practice-Related	2.80	3.56	7.08***
Quality/Safety Concerns			
Quality of Care	2.25	2.86	6.87***
Safety Concerns	2.83	3.55	8.52***
Standards of Care	2.52	3.14	6.44***
Overall Impact of Reforms	2.82	3.27	6.77***

[a] Sample size for the current study is 181.

[b] Sample size for the 1995 ARNN study was 333 (Way, 1995).

*$p < .05$, ***$p < .001$

Emotional climate. Study findings indicated that respondents were very critical of the emotional climate of the workplace ($M = 2.44$). A greater insight into the specific areas of concern is provided by referencing the individual items comprising this subscale. Most nurses felt frustrated with the reduced level of care being provided due to increased workloads (81.8%), found their jobs less satisfying and challenging since restructuring (90.4%), and did not feel they received recognition and appreciation for their work (79.3%). The majority of respondents also believed that increased demands and stress in the workplace had led to unpleasant working relations with co-workers and other health care providers (70.6%) and had engendered a sense of disillusionment and low morale (95.5%). Finally, a significant number of respondents felt that the absence of a supportive environment prevented them from doing the "extras" (55.2%) or from being motivated to act as patient advocates (55.2%).

Practice-related issues. The findings indicated that most respondents viewed practice-related issues in a negative light ($M = 2.80$). Specifically, most nurses felt that they had limited control over their practice (80.9%) and that continuing/inservice education opportunities were inadequate to keep pace with the latest developments (53.1%). Further, a significant number of respondents perceived that they had limited access to management for discussing workplace concerns (54.7%) and possible ways to resolve problems (67.4%).

Quality of care. The mean score for this subscale (M = 2.25) indicated that a significant number of nurses were concerned about the quality of care being delivered to consumers. Most nurses felt that supplies/resources were inadequate to ensure patient comfort (84.4%) or meet patients' basic care needs (74.3%). Furthermore, most respondents felt that increasing acuity levels made it more difficult to adequately assess/meet patients' emotional/psychosocial needs (89.2%). Finally, most nurses believed that patients do not have reasonable access to services since downsizing/managerial restructuring (69.8%).

Safety concerns. The findings indicated that the majority of nurses had concerns about safety measures present in the work environment (M = 2.83). Although many respondents felt that procedures were being performed safely and competently (67.8%) and physical resources were sufficient to provide safe care (61.7%), most felt that human resources were inadequate to provide safe care (72.2%). Importantly, most nurses believed that consumers were inadequately prepared for discharge (76.5%) and that community-based services were not always available for patients following hospital discharge (89.9%).

Standards of care. The findings indicated that most nurses were concerned with the care standards present in their organizations (M = 2.52). Specifically, most nurses felt that they were often forced to lower care standards because of overwhelming work demands (87.8%), and found it difficult to always

meet professional care standards due to increasing acuity and decreasing lengths of stay (78.4%). Furthermore, respondents felt that consumers were being placed at greater risk because of inadequate inservice education for staff members (56.7%) and were more susceptible to potential harm because of increased work demands and stressors (90%).

Work-Related Variables

Work-related attitudes were measured with the PCV scale, RS scale, GJS scale, and the OCQ. Behavioural intentions were assessed with the IS scale. A summary of the mean, standard deviation, and weighted mean scores for the work-related variables are presented in Table 4. The findings are summarized according to each work-related variable.

Psychological contract violation. The findings suggested that most nurses felt that their psychological contracts had been violated ($M = 2.65$). With regard to how well employers had fulfilled commitments upon hiring, only a small percentage of respondents (37.5%) felt original commitments had been fulfilled. A slightly greater number of respondents felt that employers only infrequently failed to meet commitments (43%). As well, most respondents (52%) felt that the amount of rewards received from the organization failed to match what was promised and was lower than expectations (89%).

Table 4

Mean and Standard Deviations for PCV, RS, GJS, OC and IS (N = 181)

Scales	*M*	*SD*	Weighted[a] *M*	Scale Range
Psychological Contract Violation (PCV)	10.59	2.55	2.65	1 - 5
Restructuring Satisfaction (RS)	13.98	5.74	2.8	1 - 6
General Job Satisfaction (GJS)	11.96	4.1	3.99	1 - 7
Organizational Commitment (OC)	33.57	12.21	3.73	1 - 7
Intent to Stay (IS)	9.2	2.73	3.07	1 - 5

[a] Subscale scores were summed and divided by the number of items to generate a weighted mean for comparison purposes.

Restructuring satisfaction. The findings indicated that respondents were generally dissatisfied with most aspects of restructuring (M = 2.80). More specifically, many respondents tended to be dissatisfied with the visibility and accessibility of management (68%), the degree to which managers sought input on professional care standards (65.7%), and the amount of information/inservice received on organizational changes (66.7%). Although most respondents were dissatisfied with the amount of time spent dealing with interdisciplinary conflicts (63.5%), they were equally divided on the degree of satisfaction with interdisciplinary approaches to patient care.

Job satisfaction. Study findings indicated that most nurses were neither completely satisfied nor dissatisfied with their jobs (M = 3.99). Generally, respondents were divided in relation to satisfaction with their present job. While most respondents were satisfied with the type of work required in their present position (75.7%), most believed that their coworkers were dissatisfied with their jobs (61.7%).

Organizational commitment. Overall findings indicated that respondents had a slightly low to neutral level of commitment to their organizations (M = 3.73). Respondents were equally divided on whether or not they told others that their organization was good to work for, and how proud they were to be a part of the organization. As well, respondents were equally divided on how happy they were in selecting their organization over others and whether it was the best of all

possible organizations for which to work. On the positive side, most respondents really cared about the fate of their organization (72.2%) and were willing to give that extra effort to ensure organizational success (58.4%). In contrast, the majority of respondents would not accept any type of job assignment to maintain employment with the organization (67.8%), held differing values from the organization (52.2%), and felt that they were not inspired to perform the best on the job (60.6%).

Intent to stay. Findings suggest that most respondents were uncertain about whether or not they would stay with their organization (M = 3.07). Approximately one-half of respondents indicated that they would likely stay with current employers despite the impact of recent restructuring efforts. Although most respondents (56.9%) indicated that they would consider leaving their current position if presented with another employment opportunity, only 28.1% had put serious effort into searching for a new job.

Interrelationships Among Study Variables

This section summarizes study findings on the effects of personal characteristics (i.e., area of employment, employment status, years nursing experience, current position, geographic region, education, and age) on the perceived impact of health care reforms, work-related attitudes (i.e., psychological contract violation, restructuring satisfaction, general job

satisfaction, and organizational commitment) and behavioural intentions (i.e., intent to stay).

One-way analysis of variance (ANOVA) and the t-test for independent groups were used to identify group differences. The multiple comparison procedure, the Bonferroni test, was used to identify differences in group means for ANOVA. An alpha level of .05 was selected as the significance level for all tests of difference. Pearson's *r* was used to determine the strength of the relationship among the continuous level variables. An alpha level of .05 was selected as the significance level for the tests of association.

Reform Impact and Personal Characteristics

The findings revealed few significant differences in the reform impact variables across most personal characteristics. There were no significant differences observed for years of nursing experience, employment status, geographic region, or age. Table 5 summarizes the test of difference results for years in current position, primary area of responsibility, and education.

Nurses who were in their current jobs for four years or less tended to be more positive about reforms, F (2, 171) = 4.29, $p < .05$, and the emotional climate of the workplace, F (2, 173) = 4.96, $p < .01$) than those who held their current positions for 10 years or more. As well, nurses who were mainly responsible for administration duties tended to have more positive attitudes

Table 5

RIHCR Scale by Personal Characteristics (N = 181)

Scale	Current Position	Primary Area[a]	Education
Importance of Reforms	$F = 4.29^{*}$ ($p = .015$)	$t = -2.69^{**}$ ($p = .008$)	$t = -3.31^{**}$ ($p = .001$)
Workplace Issues			
Emotional Climate	$F = 4.96^{**}$ ($p = .008$)	$t = -2.85^{*}$ ($p = .010$)	$t = -3.42^{**}$ ($p = .001$)
Practice-Related	$F = 2.16$ ($p = .119$)	$t = -7.99^{***}$ ($p = .000$)	$t = -1.76$ ($p = .086$)
Quality/Safety Concerns			
Quality of care	$F = 1.48$ ($p = .231$)	$t = -2.46^{*}$ ($p = .015$)	$t = -2.28^{*}$ ($p = .024$)
Safety concerns	$F = 0.87$ ($p = .419$)	$t = -1.29$ ($p = .197$)	$t = 0.39$ ($p = .698$)
Standards of care	$F = 0.16$ ($p = .857$)	$t = -3.39^{**}$ ($p = .001$)	$t = -1.78$ ($p = .082$)
Overall Impact	$F = 3.72$ ($p = .026$)	$t = -4.94^{**}$ ($p = .000$)	$t = -2.75^{**}$ ($p = .007$)

$^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$

[a] Due to the close proximity of the means and non-significant differences, two categories of primary area of responsibility (i.e., direct care and speciality areas) were combined into one group for comparison with the management group.

toward reforms, t (172) = -2.69, $p < .01$, the emotional climate of the workplace, t (26.7) = -2.85, $p < .05$, practice-related issues, t (174) = -7.99, $p < .001$, quality of care, t (172) = -2.46, $p < .05$, standards of care, t (173) = -3.39, $p < .01$, and the overall impact of health care reforms, t (157) = -4.94, $p < .001$, than their counterparts working in direct care. Finally, nurses with baccalaureate or higher education tended to view the importance of reforms, t (76.6) = -3.31, $p < .01$, the emotional climate of the workplace, t (174) = -3.42, $p < .01$, quality of care, t (172) = -2.28, $p < .05$, and the overall impact of health care reforms, t (157) = -2.75, $p < .01$, more positively than those with diploma/certificate education.

Work-Related and Personal Characteristics

The findings revealed few significant differences for the work-related variables (i.e., restructuring satisfaction, organizational commitment, and intent to stay) across several personal characteristics. No significant differences were observed for psychological contract violation or general job satisfaction on any of the personal characteristics. Table 6 summarizes the study findings for years nursing experience, age, geographic region of workplace, education, and primary area of responsibility.

With regard to restructuring satisfaction, nurses who were primarily responsible for administration duties or had 20 years or more of nursing

Table 6

Work-Related Variables by Personal Characteristics

Variable	Years Experience	Age	Geographic Region	Education	Primary Area
Restructuring Satisfaction	$F = 3.50^{*}$ ($p = .032$)	$r = .018$ ($p = .115$)	$t(178) = -0.56$ ($p = .579$)	$t(178) = -1.96$ ($p = .051$)	$t(178) = -4.46^{***}$ ($p = .000$)
Organizational Commitment	$F = 2.80$ ($p = .064$)	$r = .150^{*}$ ($p = .046$)	$t(177) = -2.37^{*}$ ($p = .019$)	$t(177) = -3.76^{***}$ ($p = .000$)	$t(177) = -2.82^{**}$ ($p = .005$)
Intent to Stay	$F = 4.98^{**}$ ($p = .008$)	$r = .198^{**}$ ($p = .008$)	$t(179) = -0.05$ ($p = .961$)	$t(179) = -1.53$ ($p = .127$)	$t(179) = -1.00$ ($p = .320$)

$^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$

experience were significantly more satisfied with restructuring efforts than those responsible for direct care, t (178) = -4.46, p < .001, or who had 10 to 19 years of experience, F (2, 178) = 3.50, p < .05. In addition, nurses who were primarily responsible for administration duties, who had baccalaureate or higher education, or who worked outside of the St. John's region were significantly more committed to their organizations than those primarily responsible for direct care, t (177) = -2.82, p < .01, who had diploma/certificate education, t (177) = -3.76, p < .001, or who worked in the St. John's region, t (177) = -2.37, p < .05. Finally, nurses with 20 years or more of nursing experience or who were older were significantly more likely to stay with their current employer than those with 5 to 9 years of nursing experience, F (2, 178) = 4.98, p < .01) or were younger, r = .198, p = .01.

Reform Impact with Work-Related Variables

Table 7 presents the Pearson's r correlations between the total and subscale scores of the RIHCRS and work-related variables (i.e., PCV, RS, GJS, OC, and IS). There were statistically significant, positive relationships among most major RIHCRS components and work-related variables. Many of these relationships were in the moderate to strong range. The exceptions were the importance of reforms, quality of care, and standards of care variables which depicted low to moderate correlations with most work-related variables. The

Table 7

Correlation of RIHCRS with Work-Related Variables (N = 181)

Variable	Work-related Scales				
	PCV *r*	RS *r*	GJS *r*	OC *r*	IS *r*
Importance of Reforms	0.14	.21**	.23**	.27***	.16*
Workplace Issues					
Emotional Climate	.51***	.64***	.62***	.61***	.44***
Practice-Related	.36***	.70***	.40***	.42***	.27***
Quality/Safety Concerns					
Quality of care	.22**	.29***	.24**	.23**	.25***
Safety concerns	.44***	.52***	.48***	.42***	.31***
Standards of care	.20**	.31***	.29***	.29***	.28***
Overall Reform Impact	.49***	.70***	.58***	.60***	.43***

Note. RIHCRS = Revised Impact of Health Care Reform Scale; PCV = Psychological Contract Violation; RS = Restructuring Satisfaction; GJS = General Job Satisfaction; OC = Organizational Commitment; IS = Intent to Stay.

* $p < .05$. ** $p < .01$. *** $p < .001$

findings suggested that nurses with more positive perceptions about the impact of health care reforms were more likely to feel that the organization had fulfilled its commitments, were more satisfied with health care restructuring efforts and their jobs, were more committed to their organizations, and were more likely to stay with their current employers.

Based on the coefficient of determination (i.e., r^2), the importance of reforms accounted for 4.4%, 5.3%, 7.3%, and 2.6% of the variance in restructuring satisfaction, general job satisfaction, organizational commitment, and intent to stay, respectively. The emotional climate of the workplace accounted for 26%, 41%, 38.4%, 37.2%, and 19.4% of the variance in psychological contract violation, restructuring satisfaction, general job satisfaction, organizational commitment, and intent to stay, respectively. Practice-related issues accounted for 13%, 49%, 16%, 17.6%, and 7.3% of the variance in psychological contract violation, restructuring satisfaction, general job satisfaction, organizational commitment, and intent to stay, respectively. Quality of care accounted for 4.8%, 8.4%, 5.8%, 5.3%, and 6.3% of the variance in psychological contract violation, restructuring satisfaction, general job satisfaction, organizational commitment, and intent to stay, respectively. Safety concerns accounted for 19.4%, 27%, 23%, 17.6%, and 9.6% of the variance in psychological contract violation, restructuring satisfaction, general job satisfaction, organizational commitment, and intent to stay, respectively. In

addition, standards of care concerns accounted for 4%, 9.6%, 8.4%, 8.4%, and 7.8% of the variance in psychological contract violation, restructuring satisfaction, general job satisfaction, organizational commitment, and intent to stay, respectively. Finally, the overall impact of reforms accounted for 24%, 49%, 33.6%, 36%, and 18.5% of the variance in psychological contract violation, restructuring satisfaction, general job satisfaction, organizational commitment, and intent to stay, respectively.

Interrelationships Among Work-Related Variables

Statistically significant positive relationships were observed among all of the work-related variables (see Table 8). Moderate to strong correlations were observed among most of the work-related variables with the exception of intent to stay. In terms of the coefficient of determination (i.e., r^2), psychological contract violation accounted for 28%, 30.3%, 42.3%, and 13.7% of the variance in restructuring satisfaction, general job satisfaction, organizational commitment, and intent to stay, respectively. Restructuring satisfaction accounted for 29.2%, 29.2%, and 10.2% of the variance in general job satisfaction, organizational commitment, and intent to stay, respectively. General job satisfaction accounted for 42.3%, and 24% of the variance in organizational commitment and intent to stay, respectively. Finally, organizational commitment accounted for 14.4% of the variance in intent to stay.

Table 8

Correlations Among Work-Related Scales (N = 181)

Variable	Scales			
	PCV *r*	RS *r*	GJS *r*	OC *r*
PCV	—	—	—	—
RS	.53***	—	—	—
GJS	.55***	.54***	—	—
OC	.65**	.54**	.65***	—
IS	.37***	.32***	.49***	.38***

Note. PCV = Psychological Contract Violation; RS = Restructuring Satisfaction; GJS = General Job Satisfaction; OC = Organizational Commitment; IS = Intent to Stay.

** $p < .01$, *** $p < .001$

Predictors of Outcome

Stepwise multiple regression analysis was used to identify significant predictors of intermediate outcomes (i.e., psychological contract violation, restructuring satisfaction, general job satisfaction, and organizational commitment) and behavioural intentions (i.e., intent to stay). Different combinations of predictor variables were used to identify the best regression model for each variable. The reform impact variables were entered first as a group, followed by each intermediate outcome, and finally the statistically significant correlates (i.e., personal characteristics). The findings are presented according to each major outcome variable. The results of the multiple regression analyses are summarized in Tables 9 and 10.

Psychological Contract Violation

The first level modelling was restricted to a consideration of the predictive power of the reform impact variables on psychological contract violation. Correlation analysis demonstrated significant positive relationships between most reform impact variables and psychological contract violation (see Table 7). No personal characteristics influenced psychological contract violation.

The results of regression analysis indicated that emotional climate and safety concerns combined to explain 28.7% of the variance in psychological contract violation (see Table 9). Emotional climate entered the regression

Table 9

Stepwise Multiple Regression on PCV, GJS and RS (N = 181)

	Multiple *R*	Adjusted R^2	R^2 change	*F* Value	*p*
Variable		**Psychological Contract Violation**			
Emotion	.492	.238	.242	51.55	.000
Safety	.536	.278	.045	32.26	.000
		Restructuring Satisfaction			
Practice	.727	.525	.528	177.02	.000
Emotion	.798	.632	.108	137.52	.000
Safety	.810	.650	.020	99.34	.000
PCV	.816	.657	.009	77.15	.000
		General Job Satisfaction			
Emotion	.604	.361	.365	90.93	.000
PCV	.651	.416	.058	57.60	.000
Safety	.676	.447	.034	43.81	.000

Note. Emotion = Emotional Climate; Safety = Safety Concerns; Practice = Practice-related Issues; PCV = Psychological Contract Violation.

Table 10

Stepwise Multiple Regression on OC and IS (N = 181)

	Multiple *R*	Adjusted R^2	R^2 change	*F* Value	*p*
Variable		**Organizational Commitment**			
GJS	.644	.411	.415	111.29	.000
PCV	.727	.523	.114	87.45	.000
Emotion	.747	.549	.029	65.15	.000
Region	.757	.563	.016	51.83	.000
Education	.767	.575	.014	43.69	.000
		Intent to Stay			
GJS	.500	.245	.250	52.67	.000
STD	.529	.271	.030	30.51	.000

Note. GJS = General Job Satisfaction; PCV = Psychological Contract Violation; Emotion = Emotional Climate; Region = Geographic Region of Workplace; STD = Standards of Care

equation first, accounting for 24.2% of the variance. This variable was followed by safety concerns which accounted for an additional 4.5%. Importance of reforms, practice-related issues, quality of care concerns, and standards of care failed to enter the regression equation.

Restructuring Satisfaction

The second level modelling considered the predictive power of reform impact variables, psychological contract violation, and personal characteristics on restructuring satisfaction. Correlation analysis revealed moderate to strong positive correlations with all of the reform impact variables and contract violation (see Table 7 and 8). Only two personal characteristics (i.e., primary area of responsibility and years nursing experience) were found to influence restructuring satisfaction.

During the first step of regression analysis, practice-related issues, emotional climate, and safety concerns combined to explain 65.8% of the variance in restructuring satisfaction. Practice-related issues entered the regression equation first, accounting for 53.1% of the variance. This variable was followed by emotional climate and safety concerns which accounted for an additional 10.7% and 2%, respectively. Importance of reforms, quality of care, and standards of care failed to enter the regression equation.

When psychological contract violation was added at the second step, it also entered the regression equation. The final model revealed that practice-related issues, emotional climate, safety concerns, and contract violation combined to explain 66.5% of the variance in restructuring satisfaction. Practice-related issues entered the regression equation first, accounting for 52.8% of the explained variance. This variable was followed by emotional climate, quality of care, safety concerns, and contract violation which contributed an additional 10.8%, 2%, and .9%, respectively. At the final step of regression analysis, personal characteristics failed to enter the equation.

Job Satisfaction

The third level modelling considered the predictive power of reform impact variables, psychological contract violation, and restructuring satisfaction on general job satisfaction. All of the reform impact variables, as well as psychological contract violation and restructuring satisfaction, depicted moderate to strong positive correlations with general job satisfaction. None of the personal characteristics were found to influence general job satisfaction, and therefore were not entered into the regression equation.

During the first step of the regression analysis, two reform impact variables combined to explain 40.6% of the variance in general job satisfaction. Emotional climate entered the regression equation first, accounting for 36.1% of

the variance. This variable was followed by safety concerns which accounted for an additional 4.5% of the variance. Importance of reforms, practice-related issues, quality of care concerns, and standards of care failed to enter the regression equation.

When perceived contract violation was entered at the second step, emotional climate remained the best predictor of general job satisfaction. The final model revealed that emotional climate, contract violation, and safety concerns combined to explain 45.7% of the variance in general job satisfaction. Emotional climate entered the regression equation first, accounting for 36.5% of the variance. This variable was followed by psychological contract violation and safety concerns which accounted for an additional 5.8% and 3.4% of the variance, respectively. When restructuring satisfaction was added at the third step, it failed to enter the regression equation.

Organizational Commitment

The fourth level modelling considered the predictive power of reform impact variables, psychological contract violation, restructuring satisfaction, general job satisfaction, and personal characteristics on organizational commitment. Organizational commitment depicted moderate to strong positive correlations with all of the reform impact variables, as well as psychological contract violation, restructuring satisfaction, and general job satisfaction (see

Tables 7 and 8). Several personal characteristics (i.e., age, geographic region of employment, education, and primary area of responsibility) significantly affected organizational commitment (see Table 6).

During the first step of regression analysis, emotional climate and safety concerns combined to explain 40.3% of the variance in organizational commitment. Emotional climate of the workplace and safety concerns accounted for 35.6% and 4.7% of the explained variance, respectively. Importance of reforms, practice-related issues, quality of care, and standards of care failed to enter the equation.

When perceived contract violation was added at the second step, it became the best predictor of organizational commitment, followed by emotional climate and safety, respectively. Perceived contract violation, emotional climate, and safety concerns combined to explain 51.3% of the variance in commitment, accounting for 38.9%,10.9% and 1.5% of the variance, respectively.

When restructuring satisfaction was added at the third step, it failed to enter the regression equation. When general job satisfaction was entered at the fourth step, it became the most powerful predictor of organizational commitment, and safety concerns failed to enter the equation. General job satisfaction, psychological contract violation, and emotional climate combined to explain 55.8% of the variance in commitment, contributing 41.5%, 11.4%, and 2.9%, respectively.

Two personal characteristics (i.e., region and education) entered the equation at the fifth step (see Table 10). The final model revealed that general job satisfaction, psychological contract violation, emotional climate, geographic region of workplace, and education combined to explain 58.8% of the variance in commitment, contributing 41.5%, 11.4%, 2.9%, 1.6%, and 1.4%, respectively.

Intent to Stay

The fifth level modelling considered the predictive power of reform impact variables, psychological contract violation, restructuring satisfaction, general job satisfaction, organizational commitment, and personal characteristics on intent to stay. Intent to stay depicted moderate to strong positive correlations with all of the reform impact variables, as well as psychological contract violation, restructuring satisfaction, general job satisfaction, and organizational commitment (see Tables 7 and 8). Only the personal characteristics of years of nursing experience and age significantly influenced intent to stay (see Table 6).

During the first step of regression analysis, only emotional climate entered the regression equation to explain 17.9% of the variance in intent to stay. Importance of reforms, practice-related issues, quality of care, safety concerns, and standards of care failed to enter the regression equation.

When perceived contract violation was added at the second step, it combined with emotional climate to account for 20.4% of the variance in intent to

stay. Emotional climate accounted for 18.4% of the variance, and contract violation added an additional 2%.

Restructuring satisfaction was added at the third step, but failed to enter the regression equation. When general job satisfaction was entered at the fourth step, both perceived contract violation and emotional climate failed to enter the regression equation while standards of care re-entered the equation. Organizational commitment was added at the fifth step, but failed to enter the regression equation. At the sixth step, none of the personal characteristics entered the regression equation (see Table 10). The final model revealed that general job satisfaction and standards of care combined to explain 28% of the variance in intent to stay, contributing 25% and 3%, respectively.

Reliability and Validity of Study Instruments

The reliability and validity of the RIHCRS and PCV, RS, GJS, OC, and IS scales, were also examined for the study population. Cronbach's alpha was used to assess internal consistency. The intercorrelations among subscale and total scores were used to determine construct validity of the RIHCRS.

RIHCRS

Within the current study sample, the total instrument had an alpha coefficient of .87, indicating a high level of internal consistency. Alpha

coefficients for the subscales ranged from .60 to .82: importance of reforms (.60), quality of care concerns (.69), safety concerns (.66), standards of care (.71), practice-related issues (.80), and emotional climate (.82). These findings indicate that the total scale and the subscales have good internal consistency.

Most of the intercorrelations among the subscales were statistically significant and within the moderate range (see Table 11). The only exceptions were the low correlations between the importance of reforms and the subscales of practice-related issues, safety concerns, and standards of care. These findings suggest that the subscales are related and represent distinct dimensions of the impact of health care reforms (i.e., good discriminatory power).

PCV, RS, GJS, OC, and IS Scales

Alpha coefficients were also generated for the scales measuring psychological contract violation (i.e., PCV scale), restructuring satisfaction (i.e., RS scale), general job satisfaction (i.e., GJS scale), organizational commitment (i.e., OCQ), and intent to stay (i.e., IS scale). The internal consistencies for the PCV scale (α = .75), RS scale (α = .89), GJS scale (α = .78), OCQ (α = .92), and IS scale (α = .73) were quite strong in the current study sample.

Table 11

Correlations Among RIHCRS and Subscales (N = 181)[a]

Variable	EC	PR	QC	SI	SC	RIHCRS
Importance of Reforms (IR)	.26***	.18***	.24***	.18***	.14***	.48***
Emotional Climate (EC)		.47***	.38***	.51***	.51***	.83***
Practice-Related (PR)			.31***	.36***	.25***	.67***
Quality of Care (QC)				.45***	.41***	.67***
Safety Issues (SI)					.43***	.73***
Standards of Care (SC)						.64***

Note. RIHCRS = Revised Impact of Health Care Reform Scale.

[a] Sample size is a function of missing data.

*** $p < .001$

Summary

The nurses in this 1999 study were generally more negative than positive about the impact of health care reforms in comparison to baseline data collected in 1995 prior to managerial restructuring and downsizing. Respondents were most negative about the quality of care, emotional climate, and standards of care. Two personal characteristics (i.e., primary area of responsibility and education) had the most influence on nurses' perceptions of reform impact.

Study findings also demonstrated that respondents were neither totally satisfied nor dissatisfied with their jobs, were generally dissatisfied with most aspects of restructuring, had a slightly low to neutral level of commitment to their organizations, felt that their psychological contracts with the organization had been violated, and were uncertain about whether they would stay with current employers. Several personal characteristics were found to influence the outcome variables, including years nursing experience, age, geographic region of employment, education level, and primary area of responsibility.

Most of the work-related variables (i.e., psychological contract violation, restructuring satisfaction, general job satisfaction, organizational commitment, and intent to stay) were significantly and positively related to the total RIHCRS score and five of the subscales. The only exception was the association between contract violation and importance of reforms. As well, all of the work-related variables depicted significant positive relationships with each other.

Different combinations of reform impact and work-related variables emerged as significant predictors of psychological contract violation and satisfaction (i.e., restructuring and general job satisfaction). No correlates (i.e., personal characteristics) entered the regression equation to explain any of the variance for these variables. Two determinants (i.e., emotional climate and safety concerns) emerged as significant predictors of psychological contract violation, accounting for 28.7% of the explained variance. Three determinants (i.e., practice-related issues, emotional climate, and safety concerns) and one work-related variable (i.e., psychological contract violation) emerged as significant predictors of restructuring satisfaction, accounting for 66.5% of the total variance. Two determinants (i.e., emotional climate and safety concerns) and one work-related variable (i.e., psychological contract violation) emerged as significant predictors of general job satisfaction, accounting for 45.7% of the explained variance.

With regard to organizational commitment, one determinant (i.e., emotional climate), two work-related variables (i.e., psychological contract violation and general job satisfaction), and two personal characteristics (i.e., geographic region and education) combined to explain 58.8% of the variance. Finally, one determinant (i.e., standards of care) and one work-related variable (i.e., general job satisfaction) emerged as significant predictors of intent to stay, accounting for 28% of the explained variance.

CHAPTER 5

Discussion

The Conceptual Model of Behavioural Intentions (CMBI) provided the framework for this study. The CMBI theorizes that several factors exert a direct and indirect effect on behavioural intentions (i.e. intent to stay). These factors include determinants (i.e., perceptions of the impact of health care reforms on job-related and work environment factors), covariates or intermediate outcomes (i.e., intervening attitudinal states), and correlates (i.e., personal characteristics). It is proposed by the CMBI that the determinants, covariates or intermediate outcomes, and the correlates exert a direct and indirect effect on behavioural intentions. The following is a discussion of study findings organized according to the major components of the CMBI and the relationships depicted by it.

Determinants

The determinants for the current study consisted of the importance of health care reforms, emotional climate of the workplace, practice-related issues, quality of care, safety concerns, and standards of care. One focus of this study was to investigate and compare nurses' perceptions of the impact of health care reforms four years following restructuring of the health care system. In the current study, most nurses had negative attitudes toward the overall impact of

health care reforms. Nurses were only positive about the importance of reforms. Quality of care was viewed most negatively, followed by the emotional climate of the workplace, standards of care, practice-related issues, and safety concerns. These findings on the most positive and negative areas of reform impact are similar to those found by Way (1995) and Pyne (1998). The weighted means for the total scale and all subscales were below the baseline values reported in a comparative study by Way (1995). There was a statistically significant decline in the mean scores between the two time periods. This supports the position that nurses' attitudes toward the impact of reforms have significantly worsened over the four-year time period.

In the current study, the most negative impact of system reforms was on the quality of care available to consumers. While the desired outcome of health care reforms (i.e., regionalization, downsizing, and restructuring/re-engineering) is to improve the quality of care, there is empirical support for RNs' perceptions of the negative impact of these initiatives on the quality of care available to consumers (Blythe et al., 2001; Maurier & Northcott, 2000; Rafael, 1999; Reutter & Ford, 1998; Vail, 1995; Way, 1995; Woodward et al., 1999).

The majority of nurses in the current study felt that increasing acuity levels made it more difficult to adequately assess/meet clients' emotional/psychosocial needs. Further, most felt that supplies and human/physical resources were inadequate to ensure client comfort or meet basic care needs, and that patients

did not have reasonable access to services since downsizing/managerial restructuring. Similar reports of negative effects of restructuring (e.g., decline in the numbers of nursing personnel, available resources, etc.) on the ability of nurses to deliver quality nursing care were reported by several authors (Aiken et al., 2001; Baumann et al., 2001; Blythe et al., 2001; Laschinger et al., 2001; Maurier & Northcott, 2000; Pyne, 1998; Rafael, 1999; Reutter & Ford, 1998; Way, 1995; Woodward et al., 1999).

Concerns about changes in the emotional climate of the workplace were also reported by participants in the current study. Specifically, most respondents felt that their jobs were less satisfying and challenging since restructuring, were feeling frustrated with the reduced level of care being provided due to increased workloads, and felt that they rarely received recognition or appreciation. Canadian studies lend evidence of the negative impact of reforms on the emotional climate of the workplace (e.g., Aiken et al., 2001; Armstrong-Stassen et al., 1996; Blythe et al., 2001; Laschinger et al., 2001; Maurier & Northcott, 2000; Woodward, et al., 1999, 2000, etc.).

Respondents also expressed concerns over care standards present in their organization. Most felt that clients were more susceptible to potential harm because of increased work demands and stressors, that nurses were often forced to lower care standards because of overwhelming work demands, and found it difficult to always meet professional care standards due to increasing

patient acuity and decreasing lengths of stay. Further, respondents felt that consumers were being placed at risk because of inadequate staff in-servicing opportunities. Similarly, Baumann et al. (2001) reported that nurses who experienced restructuring measures (i.e., downsizing and institutional mergers) felt they were less able to meet professional standards of care, had less time to provide basic nursing care, and to document the care they gave. There is additional support in the literature for the negative impact of reforms on standards of care (Blythe et al., 2001; Laschinger et al., 2001; Maurier & Northcott, 2000; Woodward et al., 1999).

Practice-related issues were mostly viewed in a negative light as most nurses felt they lacked sufficient control over their practice and had limited access to managers to discuss the resolution of workplace problems. Several research studies recognize changes in managerial/staff relations (e.g., decline in collaborative culture and support, feelings of isolation, fragmentation of relationships, decreased leadership, etc.) in the aftermath of system changes (Blythe et al., 2001; Laschinger, et al., 2001; Maurier & Northcott, 2000; Woodward, et al., 1999, 2000) and nurses' desire for improved relations (Baumann et al., 1996).

In the current study, most nurses related concerns over safety measures in the work environment. Most felt that community-based services were not always available to clients on hospital discharge and that clients were not

adequately prepared for discharge. Similar findings were related in a study of nurses' perceptions of job change in which nurses reported feeling they had less time to devote to teaching and preparing clients and their families (Baumann et al., 2001). In addition, while nurses did feel that procedures were being performed safely and that there was adequate physical resources, they did not feel that there was adequate human resources with which to provide safe care. Laschinger et al. (2001) also found that nurses frequently voiced concerns over the increase in safety concerns (due to inadequate staffing and skill mix levels, reduction in available resources, etc.) as a result of restructuring initiatives. Similar findings were reported by Blythe et al. (2001), where nurses described difficulties in meeting patient care needs, maintaining professional standards and acceptable levels of patient care, and carrying out expected role responsibilities.

In spite of the negative reports of the effects of reforms, the current study lends support for perceptions of the importance of reforms. Specifically, most nurses were cognizant of the challenges facing the profession, felt that the current changes would increase consumer accountability and responsibility, and felt empowered to be active participants in affirming an important role for the profession. Comparable findings on some of the positive impact of reforms (i.e., greater individual and professional growth opportunities, new and challenging roles, and improved communication and greater collaboration with clients and other health care providers) have been reported by several authors (Baumann et

al., 2001; Best et al., 1997; Pyne, 1998; Rafael, 1999; Reutter & Ford, 1998; Way, 1995; Woodcox, et al., 1994).

Intermediate Outcomes and Behavioural Intentions

The intermediate outcomes of the current study included levels of psychological contract violation, restructuring satisfaction, general job satisfaction, and organizational commitment. Behavioural intentions were measured through intent to stay. The discussion of findings is organized according to these variables.

Psychological Contract Violation

Slightly more than one-half of the nurses in the current study felt that their psychological contracts had been violated. Similar findings were reported by Robinson and Rousseau (1994) who found that 54.8% of their sample of MBA graduate alumni experienced at least one case of contract violation by employers. In contrast, Turnley and Feldman (1998) determined that only one-quarter of managers and executives employed in organizations which had undergone some form of restructuring reported contract violation. There were no other studies identified in the literature that explored employees' feelings of psychological contract violation.

Specifically, most nurses reported that the amount of rewards received from the organization was lower than expected and failed to match what was promised. Smaller numbers of nurses felt that employers infrequently failed to meet commitments and failed to fulfill the original commitments made to them upon hire. Comparable findings on the increased likelihood of perceived violation with forms of monetary compensation (e.g., base pay, employee benefits, bonuses, etc.) were reported by Robinson and Rousseau (1994) and Turnley and Feldman (1998, 1999).

Restructuring Satisfaction

Findings in the current study indicated that nurses were generally dissatisfied with most aspects of restructuring. In particular, many nurses tended to be dissatisfied with the visibility and accessibility of management, the amount of information and staff in-servicing received on organizational changes, and the degree to which managers sought input on professional care standards. Although most nurses in the current study were dissatisfied with the amount of time spent dealing with interdisciplinary conflicts, they were equally divided on the degree of satisfaction with interdisciplinary approaches to patient care.

Comparatively, other researchers noted that acute care nurses were dissatisfied with managerial relations (e.g., strained relationships, lack of support, inadequate information flow on system changes, lack of trust, etc.)

(Baumann et al., 2001; Blythe et al., 2001; Laschinger et al., 2001; Maurier & Northcott, 2000; Rout, 2000; Woodward, 1999). As well, changes in relationships with other staff have been recognized (e.g., decline in collaborative culture and support, feelings of isolation, fragmentation of relationships, etc.) (Baumann et al., 2001; Maurier & Northcott). In contrast, there is support for increased satisfaction with the greater focus on interdisciplinary approach to care following the implementation of health care reforms at the community level (Reutter & Ford, 1998).

Job Satisfaction

Study findings indicated that most nurses were neither completely satisfied nor dissatisfied with their jobs. In contrast, Pyne (1998) reported that nurses were slightly dissatisfied with their jobs. Other studies of nurses across settings and levels have reported moderate levels of job satisfaction (Acorn et al., 1997; Brown et al., 1999; Cumbey & Alexander, 1998; Luthans & Sommer, 1999; Woodward et al., 2000).

In the current study, most nurses reported being satisfied with the type of work they were required to do in their present position. In contrast, findings by Woodward et al. (2000) depicted a decline in job satisfaction of all employees following restructuring. Similar support for the perceived negative impact of system changes on nurses' roles and responsibilities (e.g., increased workload,

cross-sharing of personnel, assignment of non-nursing duties, redistributing patients across units, etc.) have been reported by several researchers (Acorn & Crawford, 1996; Aiken et al., 2001; Armstrong-Stassen et al., 1996; Laschinger et al., 2001; Woodward et al., 2000).

Organizational Commitment

Overall findings indicated that respondents had a slightly low to neutral level of commitment to their organizations. Other nursing studies have reported higher commitment levels than that of the current study (Acorn et al., 1997; Lee & Henderson, 1996; Luthans & Sommer, 1999). However, Luthans & Sommer (1999) reported that nurse managers experienced a decline in feelings of commitment following the implementation of restructuring measures. Decreased commitment of staff nurses, as a result of restructuring efforts, were also reported by other authors (Baumann et al., 2001; Blythe et al., 2001; Laschinger et al., 2000, 2001).

Intent to Stay

Study findings suggest that most respondents were uncertain about whether or not they would stay with their organization. These findings are similar to those reported by Laschinger et al. (2000). Approximately one-half of respondents indicated that they would likely stay with current employers despite

the impact of recent restructuring efforts. Similarly, Cavanagh and Coffin (1992) found that nurse managers exhibited a high propensity to stay with their current employer. The findings from the health care sector contrast with those studies in business, which describe how employees working in organizations with more extensive restructuring (versus those working in more stable work environments) were more likely to intend to leave or search for other employment opportunities (Robinson & Rousseau, 1994; Turnley & Feldman, 1998, 1999). However, Laschinger et al. (2000, 2001) describe that RNs in their studies reported being more uncertain about staying with current employers following restructuring.

Factors Influencing Intermediate Outcomes and Behavioural Intentions

The CMBI theorizes that determinants, intermediate outcomes, and correlates exert direct and indirect effects on behavioural intentions. A causal, linear process with intermediate variables influencing each other and intervening between preceding and subsequent variables is reflected in this model. The relationships between and among key study variables were explored and are discussed in the following section according to the relationships outlined by the CMBI.

Determinants, Outcomes, and Intentions

One of the research questions in the current study examines the effects of determinants on intermediate outcomes and behavioural intentions. The following discussion is presented according to each intermediate outcome and intent to stay.

Psychological contract violation. Moderate to strong, positive relationships were observed between psychological contract violation and some major RIHCRS components. The exceptions were quality of care and standards of care, which depicted low correlations with psychological contract violation. The findings suggest that lower levels of psychological contract violation are significantly associated with more positive perceptions of the overall impact of reforms, the emotional climate of the workplace, safety measures, practice-related issues, quality of care, and standards of care.

There were no comparable studies identified in the literature that explored this relationship. However, study findings reported by Turnley and Feldman (1998, 1999) indicated that business employees in organizations that had undergone extensive restructuring were more likely to report psychological contract violation than those working in more stable firms. This adds support to the suggested relationship between contract violation and practice-related issues. Further, these researchers found that key situational factors (i.e., positive working relations with supervisors and a strong sense of procedural

justice) buffered strong reactions to contract violation. These findings provide additional support for the strong relationships observed in the current study between the emotional climate of the workplace (i.e., working relations and contract, and job satisfaction and challenge), safety, and practice-related issues (i.e., inservice opportunities, active involvement in discussions of workplace problems and possible resolutions, and control over practice) and psychological contract violation.

Restructuring satisfaction. The findings of the current study depicted restructuring satisfaction as having moderate to strong, positive relationships with the total RIHCRS and most subscale scores. The exceptions were quality of care and importance of reforms, both of which depicted low, positive correlations with restructuring satisfaction. These findings indicate that higher levels of restructuring satisfaction were significantly associated with more positive perceptions of the impact of health care reforms.

Congruent with the findings of this study, the literature provides some support for the relationships between job-related and work environment factors and nurses' satisfaction with restructuring initiatives. Research studies have identified both negative (e.g., increased workload, cross-sharing of personnel, assignment of non-nursing duties, redistributing patients across units, less time for client contact, etc.) (Acorn & Crawford, 1996; Aiken et al., 2001; Blythe et al., 2001; Laschinger et al., 2001; Reutter & Ford, 1998; Woodward et al., 2000) and

positive practice-related changes (e.g., development of new roles, improved communication and collaboration, etc.) on nurses' roles and responsibilities following restructuring initiatives (Reutter & Ford).

Job satisfaction. The current study's findings indicated that general job satisfaction had moderate to strong, positive relationships with the total RIHCRS and some of the subscales. The exceptions were standards of care, quality of care, and importance of reforms, which depicted low, positive relationships. The findings suggest that nurses with more positive perceptions about the impact of reforms (i.e., job-related and work environment factors) were more likely to have higher job satisfaction levels.

The literature supports the influence of various aspects of the emotional climate of the workplace (e.g., staff/supervisory relationships, colleague support, organizational climate, supportive work environments, etc.) on nurses' job satisfaction (Acorn et al., 1997; Armstrong-Stassen et al., 1996; Best et al., 1997; Brown et al., 1999; Cavanagh & Coffin, 1992; Luthans & Sommer, 1999; McNeese-Smith, 1997; Pyne, 1998; Rout, 2000; Woodward et al., 2000). Similarly, practice-related factors (e.g., role expectations, autonomy, decision-making abilities, organizational requirements, etc.) (Acorn et al.; Blegen, 1993; Brown et al.; Cavanagh & Coffin; Irvine & Evans, 1995; McNeese-Smith; Pyne; Woodward et al., 2000) and safety issues (e.g., time to document care, teach clients, maintain professional standards, etc.) (Baumann et al., 2001; Pyne) have

also been described as influencing levels of job satisfaction. These findings offer credibility to the current study's findings of the observed relationships between job satisfaction and the emotional climate of the workplace, practice-related issues, and safety concerns.

Organizational commitment. In the current study, moderate to strong, positive relationships were observed between organizational commitment and the total RIHCRS and some subscale scores. The exceptions were the importance of reforms, quality concerns, and standards of care, which depicted low, positive correlations with organizational commitment. These findings suggest that nurses with higher levels of commitment to their organizations were more likely to have more positive perceptions about the overall impact of health care reforms.

There were very few studies identified from the literature that investigated the impact of health care reforms (i.e., job-related and work environment factors) on nurses' organizational commitment. Existing studies report that greater practice-related opportunities (e.g., greater autonomy and/or decision-making abilities, etc.) (Acorn et al., 1997; Laschinger et al., 2000; McNeese-Smith, 1997) and a more positive emotional climate (e.g., greater colleague and/or supervisory support) (Blythe et al., 2001; Ingersoll et al., 2000; Lee & Henderson, 1999; Luthans & Sommer, 1999; McNeese-Smith, 1997; Mueller & Price, 1990) were associated with greater organizational commitment. Further, Mathieu and Zajac

(1990) reported that many components of the work environment (e.g., higher motivation, greater job involvement, greater satisfaction with coworkers and supervisors, more promotional opportunities, lower stress levels, etc.) have been shown to be significantly associated with higher levels of organizational commitment.

Intent to stay. Current findings revealed low to moderate, positive relationships between behavioural intentions (i.e., intent to stay) and the total RIHCRS score and most subscale scores. These findings suggest that nurses with greater intentions of staying with current employers were more likely to give more positive ratings to the overall impact of reforms. Blythe et al. (1999) identified the influence of practice-related factors (e.g., promotional opportunities, control over practice, other job opportunities, etc.) and the emotional climate (e.g., situational stress, distributive justice, etc.) on employees' intent to stay. Similarly, Cavanagh and Coffin (1992) found that a greater sense of group cohesion increased nurses' likelihood of staying with current employers. No other studies were identified from the literature that investigated the effect of similar job-related and work environment factors on nurses' behavioural intentions. Finally, it is interesting to note that Robinson and Rousseau (1994) reported that perceived contract violation influenced the length of time an employee intended to stay with the employer (accounting for 16% of the explained variance).

Interactive Effects

The CMBI proposes that intermediate outcomes have a direct and indirect effect on intentions. Thus, one of the research questions for the current study explored interactive effects among intermediate outcomes and their effect on behavioural intentions.

The findings of the current study depicted moderate to strong, positive relationships among all intermediate outcomes, and between intermediate outcomes and behavioural intentions. This suggests that lower levels of psychological contract violation is strongly associated with greater restructuring and general job satisfaction, higher levels of organizational commitment, and moderately associated with a greater likelihood of staying with the employing organization. Robinson and Rousseau (1994) reported similar findings on the strong association between lower levels of contract violation and greater job satisfaction, as well as a greater intent to stay. As well, Turnley and Feldman (1998, 1999) reported that lower levels of contract violation were moderately associated with greater loyalty or commitment toward the employing organization and a lesser intent to leave.

In addition, greater restructuring satisfaction was significantly correlated with greater job satisfaction, organizational commitment, and intent to stay. Other research findings support the positive impact of managerial leadership and

support on nurses' job satisfaction (Brown et al., 1999; McNeese-Smith, 1997; Woodward et al., 2000), organizational commitment (Ingersoll et al., 2000; Laschinger et al., 2000; McNeese-Smith), and intent to say (Laschinger et al., 2000). Job satisfaction has also been shown to strongly and positively influence organizational commitment (Blegen, 1993; Corser, 1998; Luthans & Sommer, 1999; Mathieu & Zajac, 1990; Mueller & Price, 1990) and intent to stay (Cavanaugh & Coffin, 1992; Irvine & Evans,1995; Parasuraman, 1989). Further support for the positive relationship between greater job satisfaction and greater intent to stay was demonstrated in a study of MBA graduates (Robinson & Rousseau, 1994). Similarly, the presence of a positive relationship between greater loyalty and greater intent to stay was described by several researchers in studies of managers and executives (Mathieu & Zajac; Mueller & Price; Turnley & Feldman, 1998, 1999).

Correlates, Outcomes, and Intentions

The current study also explored the effects of correlates (i.e., personal characteristics) on intermediate outcomes and behavioural intentions. The findings revealed that correlates had variable effects on restructuring satisfaction, organizational commitment and intent to stay.

Specifically, higher levels of restructuring satisfaction were reported by nurses primarily responsible for administrative duties or who had more than 20

years or more of nursing experience. No significant effects were found for age, geographic region, education, or years in current position. Support in the literature for the effects of personal characteristics was limited, with several authors failing to find significant influences for personal characteristics on intermediate outcomes (Rout, 2000; Turnley & Feldman, 1998, 1999). Contrary to the current study's findings, Blegen (1993) found a low association between increased job satisfaction and more years of experience. Other authors reported similar findings (Cumbey & Alexander, 1998; Irvine & Evans, 1995; Mathieu & Zajac, 1990; Pyne, 1998). Conflicting findings also exist on the direction of the relationship between restructuring satisfaction and role responsibilities (i.e., administrative duties) (Acorn et al., 1997; Lee & Henderson, 1996; Luthans & Sommer, 1999; Woodward et al., 2000).

In addition, higher levels of commitment were reported by nurses who had baccalaureate or higher education, or who worked outside of the St. John's region. There were no significant effects found for age, or years in current position. While there is evidence for the increase in commitment of older (Luthans & Sommer, 1999; Mathieu & Zajac, 1990) and higher educated (Mathieu & Zajac) employees, other studies have failed to find support for the effects of age or education (Acorn et al., 1997; Laschinger et al., 2000) on levels of commitment.

Finally, nurses with 20 years or more of nursing experience or who were older were more likely to stay with their current employer. No significant effects for education level, years in current position, primary area of responsibility, or geographic region were evident. In contrast to the current study, Cavanagh and Coffin (1992) reported that employees with less education were more likely to remain with their employing organization.

Predictors of Intermediate Outcomes and Behavioural Intentions

Another area of focus of the current study was to identify the best predictors of intermediate outcomes and behavioural intentions. The discussion is presented according to the relevant intermediate outcome and behavioural intentions.

Psychological Contract Violation

The CMBI postulates that the determinants (i.e., job-related and work environment factors) most influenced by reforms would have a direct effect on employee perceptions of psychological contract violation. It was reasoned that more positive perceptions of health care reforms would result in lower levels of perceived psychological contract violation. It was also anticipated that the correlates (i.e., personal characteristics) would only have a minimal effect on perceptions of contract violation. The findings of the current study validate that

perceptions of the impact of health care reforms affect nurses' perceived levels of psychological contract violation.

This study's findings revealed that two determinants (i.e., emotional climate of the workplace and safety concerns) emerged as significant predictors of levels of psychological contract violation. This lends only partial support for the influence of determinants on contract violation. In the current study, emotional climate surfaced as the best predictor (i.e., 24.2% of the explained variance), followed by safety concerns. These findings suggested that nurses' perceptions of the impact of reforms on the emotional climate of the workplace (e.g., staff relations, morale, motivation to act as client advocate, recognition received, etc.) and safety in the workplace (e.g., performance, adequacy of resources, effectiveness of discharge planning, etc.) influenced the nature and occurrence of psychological contract violation. No comparative research studies were found in the health care literature. However, there is empirical support from the business sector that demonstrates the mitigating effect of positive working relations on perceived psychological contract violation (Turnley & Feldman, 1998).

Restructuring Satisfaction

The causal process of the CMBI theorizes that the determinants (i.e., job- and work-related factors) would directly affect restructuring satisfaction (i.e.,

managerial and interdisciplinary relations). It was also anticipated that psychological contract violation would act as a mediating variable. Further, the correlates (i.e., personal characteristics) were expected to only exert a minimal influence on restructuring satisfaction.

The findings from this study support the direct influence of the determinants on nurses' restructuring satisfaction levels. Practice-related issues and emotional climate of the workplace surfaced as the two best predictors of restructuring satisfaction (i.e., accounting for 52.8% and 10.8% of the explained variance, respectively). Counter to model predictions, these two determinants had a stronger direct effect on nurses' levels of restructuring satisfaction than psychological contract violation. Safety concerns and psychological contract violation only contributed an additional 2.9% to the explained variance.

There were no identified research studies that investigated the predictive power of various job-related and work environment factors on nurses' restructuring satisfaction. Further, no studies were found in the literature that explored the predictive power of psychological contract violation and personal characteristics on restructuring satisfaction.

Job Satisfaction

The CMBI postulates that determinants would have a direct influence on job satisfaction, as well as an indirect effect through restructuring satisfaction.

The causal process depicted by the model presents restructuring satisfaction as a significant intervening variable between the determinants, psychological contract violation, and job satisfaction. Therefore, it was expected that restructuring satisfaction would surpass the determinants and psychological contract violation in predictive power. However, restructuring satisfaction failed to enter the model and thus its mediating role was not supported in the current study. In contrast, other researchers found that managerial support (e.g, supervisory support, leadership style, communication, etc.) was a significant predictor of job satisfaction (Brown et al., 1999; Hastings & Waltz, 1995; Woodward et al., 2000).

The findings of the current study provided partial support for the effects of determinants on nurses' job satisfaction levels. Similar to psychological contract violation, emotional climate emerged as the best predictor of job satisfaction (i.e., 36.5% of the explained variance). There is strong empirical support for the predictive influence of the emotional climate of the workplace (e.g., recognition, communication, work relations, stress, positive work environment, support, structure, etc.) on nurses job satisfaction (Brown, et al., 1999; Cumbey & Alexander, 1998; Pyne, 1998; Rout, 2000; Woodward et al., 2000).

In the current study, psychological contract violation moderated the effects of safety concerns on job satisfaction. Lower levels of contract violation and more positive perceptions of the emotional climate and safety concerns

combined to explain 45.7% of the variance in nurses' job satisfaction. While there was only one study identified that found support for the strong association between greater psychological contract violation and lower levels of job satisfaction (Robinson & Rousseau, 1994), the authors did not investigate predictive effects.

Further, the correlates (i.e., personal characteristics) did not exert an effect on general job satisfaction. Although this finding is contrary to expectations, there are inconsistent reports in the literature. Other authors have found support for the influence of personal characteristics (e.g., years nursing experience, age, time with the organization, etc.) on nurses' job satisfaction levels (Cumbey & Alexander, 1998; Laschinger et al., 2000; Luthans & Sommer, 1999; Pyne, 1998; Woodward, et al., 2000).

Organizational Commitment

It was further conjectured that the determinants (i.e., job-related and work environment factors) would exert a direct effect on organizational commitment, as well as an indirect effect through job satisfaction. According to the causal sequence of the CMBI, general job satisfaction is identified as a significant intervening variable between the determinants, psychological contract violation, restructuring satisfaction, and organizational commitment. This study's findings confirmed that job satisfaction is the most influential factor for organizational

commitment, and also mediates the predictive effects of psychological contract violation and determinants. As predicted, psychological contract violation also mediated the predictive effects of determinants. Counter to expectations, restructuring satisfaction failed to enter the regression equation.

Study findings provide partial support for the effects of determinants on nurses' organizational commitment. Initially, the emotional climate of the workplace emerged as the best predictor of organizational commitment (i.e., accounting for 35.6% of the explained variance). Similarly findings were reported in the literature to support the influence of select work environment factors (i.e., motivation, stress levels, satisfaction with supervisors and coworkers, etc.) on organizational commitment (Mathieu & Zajac, 1990).

As predicted, when perceived contract violation was entered into the regression equation for organizational commitment, it moderated the effects of two of the determinants (i.e., emotional climate of the workplace and safety concerns). When general job satisfaction was added into the equation, it became the best predictor of organizational commitment (explaining 41.5% of the variance) and mediated the effects of psychological contract violation and emotional climate of the workplace. Two correlates (i.e., geographic region of workplace and level of education) entered the regression equation at this point.

There is evidence to support the effects of psychological contract violation and general job satisfaction on levels of organizational commitment. However,

no comparable support exists in the health care literature for psychological contract violation. Higher levels of psychological contract violation were reported as being significant predictors of lower levels of organizational loyalty (Turnley & Feldman, 1998, 1999). Also, there has been much support for the influential effects of job satisfaction on organizational commitment (Blegen, 1993; Hasting & Waltz, 1995; Mathieu & Zajac, 1990; Mueller & Price, 1990; Price & Mueller, 1986).

Support was also found in the literature for the predictive power of determinants. Ingersoll et al. (2000) found that greater perceived organizational readiness for change and the presence of a constructive organizational culture were significant predictors of greater commitment. As well, Laschinger et al. (2000) reported that greater access to empowerment structures (e.g., information, resources, etc.) and greater interpersonal trust were predictive of greater levels of commitment.

Intent to Stay

It was proposed that the determinants would exert a direct effect on behavioural intentions (i.e., intent to stay), as well as an indirect effect through organizational commitment. According to the causal sequence of the CMBI, organizational commitment is presented as a significant intervening variable

between determinants, psychological contract violation, restructuring satisfaction, general job satisfaction, and intent to stay.

Contrary to expectations, the findings of the current study did not support the assumption that organizational commitment is the best predictor of intent to stay, or that it has a mediating influence between determinants and other intermediate outcomes. Rather, the current study's findings support the positive effect of general job satisfaction on nurses' intent to stay. Job satisfaction also mediated the effects of determinants, psychological contract violation, and restructuring satisfaction. As the dominant predictors in the regression model, lower levels of general job satisfaction (25%) and lower standards of care (3%) combined to account for 28% of the explained variance in nurses' intent to stay.

Few studies were identified that investigated predictive factors for nurses' intent to stay. Several studies support the indirect effects of determinants (e.g., stress, group cohesion, workload, etc.) on turnover intentions through job satisfaction (e.g., Cavanagh & Coffin, 1992; Mueller & Price, 1990; Parasuraman, 1989; Price & Mueller, 1986). Other authors reported on the predictive power of job satisfaction on intent to stay (Cavanagh & Coffin; Hastings & Waltz, 1995). Similarly, Robinson and Rousseau (1994) and Turnley and Feldman (1999) determined that greater reporting of perceived psychological contract violation was related to greater intentions to quit. There is

also support for strong effects of organizational commitment on intent to stay (Mueller & Price; Parasuraman).

Implications of Findings for the CMBI

Findings from the current study lend partial support for the major assumptions of the CMBI. Overall, the data suggest that nurses' behavioural intentions (i.e., intent to stay) are derived from a complex interaction of factors, including determinants (i.e., impact of health care reforms or job-related and work environment factors), covariates or intermediate outcomes (i.e., psychological contract violation, general job and restructuring satisfaction, and organizational commitment), and correlates (personal characteristics).

However, the findings of the current study emphasizes the importance of general job satisfaction as the most important determinant of intentions. This is in contrast to the major assumptions of the CMBI, which postulates that organizational commitment is the key predictor of behavioural intentions. While current study findings conflict with some research studies on organizational commitment (Mueller & Price, 1990; Parasuraman, 1989; Price & Mueller, 1981), there is support for the assumption that commitment may not influence or moderate the effects of job satisfaction on intent to stay (Curry et al., 1985; Price & Mueller, 1986).

It was thought that perceptions of the job and work environment (i.e., importance of health care reform, quality of care concerns, safety issues, practice-related issues, emotional climate of the workplace, and standards of care) would have a stronger effect on work-related attitudes than intent to stay. Study findings only partially supported this assumption, as only one work-related variable (i.e., standards of care) was shown to influence intentions. The low predictive power of determinants in the current study confirms the need for further exploration.

It was also conjectured that intermediate outcomes (i.e., psychological contract violation, restructuring satisfaction, job satisfaction, and organizational commitment) would exert separate and interactive effects on each other and on behavioural intentions. The linear process represented in the CMBI proposes that each attitudinal variable would moderate the effect of each preceding attitude. However, current study findings did not substantiate this assumption. Only one attitude (i.e., general job satisfaction) was found to consistently moderate the effects of preceding attitudinal variables (i.e., restructuring satisfaction and contract violation).

Furthermore, the model's assumption that correlates (i.e., personal characteristics) exert a significant effect on attitudes and behavioural intentions was not supported. Only two personal characteristics (i.e., geographic region of workplace and level of education) were found to affect intermediate outcomes.

These findings are supported in similar research studies that demonstrate the marginal influence of personal characteristics on attitudes and behavioural intentions (Mueller & Price, 1990; Price & Mueller, 1981, 1986; Turnley & Feldman, 1998, 1999).

Summary

This study investigated nurses' perceptions of the impact of health care reforms, work-related attitudes, and behavioural intentions following system-wide reform of the health care system. A secondary aim of the current study was to identify key predictors of intermediate outcomes and behavioural intentions. The CMBI provided the conceptual framework for this study.

In general, the current study findings on nurses' perceptions of the impact of reforms and their current levels of psychological contract violation, restructuring satisfaction, general job satisfaction, organizational commitment, and behavioural intentions were supported by research literature. Further, the current findings lend some support for the major premises of the CMBI. The findings confirm that behavioural intentions (i.e., intent to stay) are the result of a complex interaction between the perceived impact of health care reforms, work-related attitudes, and personal characteristics. Specifically, the findings of the current study supported general job satisfaction and standards of care as the best predictors of nurses' behavioural intentions. However, the effects of the

individual variables on behavioural intentions in the current study were not congruent with the proposed linear process of the CMBI. Specifically, work-related variables (i.e. standards of care) had greater predictive power than most intermediate outcomes. Further, not all of the intermediate outcomes exerted a separate and interactive effect on each other and/or behavioural intentions. Current study findings stress the importance of the need for additional research using the CMBI with other nursing populations.

CHAPTER 6

Implications

This chapter discusses the strengths and limitations and implications of the current study. The first section outlines the strengths and limitations of the study. The second section provides a summary of the implications for nursing practice/administration, education, and research.

Strengths and Limitations

Findings provided useful insights into nurses' perceptions of the impact of health care reforms, their work-related attitudes (i.e., psychological contract violation, restructuring satisfaction, job satisfaction, and organizational commitment), and behavioural intentions (i.e., intent to stay) following a period of system-wide health care reform. This study provides comparative data from a sub-group of nurses on changes in their perceptions of health care reform four years after the initiation of major restructuring initiatives in Newfoundland and Labrador. This information is fundamental to the understanding and interpretation of the effects of organizational change on, and responses of, nurses over time.

The small sample size and a slightly more than 60% response rate reduced the reliability of making substantial inferences from the findings. However, both the generalizability of the findings and the representativeness of

the sample were improved by including the total accessible population in the initial (1995) survey, on which the current sample is based. Further, the inability to differentiate the various nursing practice areas within the current sample (e.g., acute care, community health, long-term care, etc.) does not allow for the generalizability of study findings to specific groups of nurses within the province of Newfoundland and Labrador.

Further, there was potential for response bias from the use of self-report instruments, as well as variation in responses based on individual interpretation of scale items. Lastly, collaboration between co-workers when completing the survey was a distinct possibility, despite surveys being sent to home addresses. These extraneous effects could compromise the validity of findings, as well as their generalizability to other populations of nurses.

Implications

Data from the current study have implications for nursing practice/ administration, education, and research, as discussed in the following sections.

Practice/Administration

This study has demonstrated that nurses' perceptions about the impact of health care reform (i.e., importance of reforms, emotional climate, practice-related issues, quality of care, safety issues, and standards of care) were

overwhelmingly uniform. Overall, nurses in this study were negative about all aspects of the work environment (i.e., emotional climate, practice-related concerns, quality of care, safety concerns, and standards of care) and only slightly positive about the importance of reforms. Quality of care concerns were viewed most negatively, followed by emotional climate of the workplace, standards of care, practice-related concerns, and safety concerns. Further, most of these perceptions of work-related and work environment factors were shown to significantly influence nurses' work-related attitudes (i.e., psychological contract violation, restructuring satisfaction, job satisfaction, and organizational commitment) and behavioural intentions (i.e., intent to stay).

Interestingly, general job satisfaction emerged as the best predictor for behavioural intentions of nurses. It is this variable that employers and supervisory personnel have the greatest ability to influence through professional practice initiatives, such as creating opportunities for professional development, job recognition, promoting advancement, and increasing the quality of supervision. Additionally, current research findings can increase nurses' insight into key factors influencing their job satisfaction and manners in which they could assume greater responsibility for improving satisfaction levels within their organizations (e.g., seeking out and participating in professional development initiatives, becoming more involved in decision-making opportunities, increasing interactions with supervisors to enhance feedback, etc.).

The current study findings can also provide employers and organizations with details on the aspects of nurses' job satisfaction that require intervention. The need for autonomy, interdisciplinary approaches, appreciation, job recognition, opportunities to improve professional practice, adequate resources to provide quality care, involvement in decision-making, improved communication, and coworker and managerial support are critical in promoting more positive work-related attitudes, enhancing the climate of the workplace and increasing nurses' likelihood of staying with current organizations. It is imperative that employers celebrate nurses' accomplishments, be clear in their expectations and delegation of responsibilities, invest in staff retraining and professional development, and make resources (e.g., time, financial, etc.) available to nurses.

Study findings also highlighted the importance of extending research efforts into factors influencing nurses' work-related attitudes and behavioural intentions. Data gathered would prove beneficial for organizations and employers in creating and implementing initiatives to better nurses' work-related attitudes. The importance of increasing the visibility and accessibility of managers to staff nurses, and motivating supervisors to listen more closely to nurses' concerns and more regularly seek their input, is suggested by the findings. Involving nursing staff in making decisions about organizational change that affect practice and encouraging better managerial interactions and

communications with staff could potentially enhance nurses' perceptions of reforms and improve work-related attitudes. Managers must ensure that nursing staff fully understand the organizational mission and goals and how a new vision relates to and impacts upon nursing practice.

In addition, it is imperative that employers are aware of nurses' expectations prior to and during the employment contract in an endeavour to ensure that nurses' intrinsic and extrinsic remunerations are congruent with employer expectations (e.g., dedication, organizational loyalty, etc.). The importance of forging new psychological contracts cannot be overemphasized. Additionally, employers also need to be more involved in identifying and addressing sources of stress for nurses. The introduction of employer-initiated support programs (e.g., stress management, employer-employee relations courses, etc.) could positively influence nurses' perceptions of their psychological contracts, increase job satisfaction and improve levels of organizational commitment. Lastly, employers need to improve their knowledge of the key factors influencing nurses' intent to stay and, in response, employ specific retention strategies to encourage nurses to remain (e.g., converting more positions to full-time status, offer greater opportunities for advancement and professional learning, etc.).

Education

An understanding of the current study's findings has significant implications for baccalaureate nursing education and the preparation of future nurses. As nurse educators strive to meet the fundamental needs of an increasingly complex organization of health care services and delivery, it is vital that they incorporate information on the socioeconomic and political factors in the work environment that impact on nursing practice. Nursing students also need to become cognizant of practising nurses' attitudes and behaviours regarding the overall impact of health care reform. Insight into work-related challenges facing the nursing profession should be included in their course of study.

In the current study, nurses were more negative than positive about the overall impact of reforms. That is, many nurses felt that overall reform had negative consequences. However, most respondents indicated that they understood the importance of reforms such as downsizing/restructuring. It is important that educators present both the benefits and challenges of health care reform so as to depict a more accurate picture of the changing context of health care in all settings. As most nurses in the current study felt empowered to be active participants in affirming an important future role for their profession, perhaps one of the most important skills educators can instill in their students is

the ability to foster positive change to create new and more healthy environments.

Current study findings indicated that general job satisfaction was the most powerful predictor of work-related attitudes (i.e., organizational commitment) and behavioural intentions (i.e., intent to stay). In addition, most nurses had concerns about the negative impact of reforms on standards of care. These findings support the need for educators to enhance students' knowledge and comprehension of the profound effects of reforms on nursing practice standards, as well as the importance of professional accountability and advocacy in care delivery.

Consideration should be given to the impact of work environment factors, both positive and negative, on attitudes and behaviours. Innovative approaches for cultivating a positive workplace environment should be discussed, explored, and integrated into the clinical practice area of students. Effective organizational and prioritization skills (i.e., time management, organization, cost-containment, etc.), as well as effective leadership and management skills (e.g., interpersonal communication, collaborative leadership, active listening, etc.), can better prepare the student to enter a demanding health care environment and, as such, should be standard in undergraduate education.

Research

The important influence of nurses' perceptions of the impact of health care reforms on their work-related attitudes and behavioural intentions was supported by the findings of the current study. Insight into how nurses perceive the impact of reforms, as well as their current levels of work-related attitudes and behavioural intentions, was also gained through this study. To develop a clearer understanding of what has and has not worked in the area of health care reform, more in-depth research is warranted. There is a vital role for more research in this field to increase the accuracy of insights into how current health care reform has, and future reforms may, impact on nurses' practice, work-related attitudes, and behavioural intentions.

As well, further investigation of other factors thought to influence perceptions, attitudes, and behaviours are required. More empirical data is needed by health care organizations to determine whether reform initiatives are truly meeting intended goals and to encourage more regular evaluation of the impact on nurses (i.e., psychological contract violation, restructuring satisfaction, job satisfaction, commitment, and intent to stay) over time. Further research would lend support to the belief that informed decision-making, especially with regard to creating appropriate strategies to enhance work-related attitudes and behavioural intentions, is beneficial to nurses' professional well-being and job satisfaction. Greater efforts into the exploration of key work-related and work

environment factors thought to influence nurses' behavioural intentions would assist organizations and supervisors in recognizing the most useful strategies for increasing nurse retention.

Qualitative research into nurses' perceptions of the impact of health care reform and their work-related attitudes and behavioural intentions would complement the findings of the current study. More in-depth responses (gathered through the use of focus groups, one-on-one interviews, etc.) could provide greater insight into the lived experiences of nurses during the years of reform and reveal ways in which workplace conditions could be improved. Also, longitudinal studies would give a more accurate picture of the effects of health care reform on the work life of nurses over time.

Lastly, the current study has implications for theory development. As only partial support was provided for the proposed conceptual framework (i.e., the CMBI) by the findings of the current study, more research using this model is required. Other models of nurse turnover behaviour could be used in future research studies to assist in identifying the most useful conceptual framework for explaining nurses' behaviours and attitudes. As well, repeat use of the EAS with other nursing populations could improve the generalizability of findings and the overall strength of this tool in assessing key study variables.

Summary

Limitations of the current study were in relation to the internal and external validity of the findings, a low response rate, voluntary nature of the sample, and the use of self-report data. These considerations limit the generalizability of study results.

However, findings of the current study have important implications for nursing administration/practice, education, and research. Study findings provided knowledge of nurses' perceptions of health care reforms, and their work-related attitudes and behavioural intentions. Further, greater insight was gained into factors influencing these attitudes and behaviours. Study findings supported job satisfaction as the key predictor of nurses' work-related attitudes (i.e., organizational commitment) and behavioural intentions(i.e., intent to stay). Therefore, the current study provides crucial information for organizations, managerial personnel, and nurses on factors influencing job satisfaction.

Implications of the findings for nursing education include the need to make students aware of the impact of reform on nurses and the social and political environment surrounding nursing. Education related to nurses' work-related attitudes and behavioural intentions, and possible influencing factors, is also warranted. Additionally, students should be aware of the positive and negative aspects of reform, as well as possible strategies to enhance the workplace.

Implications from the current study's findings for health care research include the need for further exploration in the area of nurses' perceptions of health care reforms. To gain greater insight into the significance of health care reform for nurses and their practice, both qualitative and longitudinal research studies would be beneficial. Additional research using the CMBI, as well as other complementary theoretical frameworks, is necessary to establish their reliability and validity across various nursing populations.

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Appendix A

Cover Letter and Employee Attitudes Survey

You Will Only Be Heard If You Respond!

Nursing Colleague:

You were randomly selected to receive a questionnaire on health care reforms in the Winter of 1995. Since then, a number of significant changes have occurred in the provincial health care system as a result of downsizing and restructuring initiatives. Because of your involvement in the previous study on the impact of health care reforms, we are **extremely** interested in your personal experiences with and opinions of reforms between 1995 and 1999. It is important that you answer the questions yourself and that the questionnaire is not shared with your nursing colleagues.

We hope that you will take this opportunity to express your views. Your input is desperately needed. If we get the desired response rate, the information will be presented at the next Annual General Meeting.

Enclosed is an envelope (postage pre-paid) for you to return the questionnaire. Thank you for taking the time to help us with this project.

The deadline reply date is June 28, 1999.

Enclosure

Part I: General Information

The information that you provide in this section will be helpful in determining how representative the sample is in terms of the nursing workforce. It will also facilitate comparisons across areas of practice and within and among regions. Please **ONLY CIRCLE ONE RESPONSE** for Questions 1 thru 9.

PLEASE DO NOT WRITE IN THIS SECTION.

CODE

1. Occupation:

   (1) Allied Health Care Professional (Specify) _____
   (2) Licensed Practical Nurse
   (3) Registered Nurse _____

2. Primary Area of Responsibility:

   (1) Direct Care
   (2) Administration (includes management)
   (3) Education (Inservice/Consumer)
   (4) Other (please specify)_____ _____

3. Position Held:

   (1) Administrator
   (2) Educator
   (3) Researcher
   (4) Staff/Clinician
   (5) Other (please specify) _____ _____

4. Total Number of **Years Experience** in Health Care:

   (1) Less than 1 year (4) 5 to 9 years
   (2) 1 to 2 years (5) 10 to 19 years
   (3) 3 to 4 years (6) 20 years or greater _____

5. Total number of **Years in Current Position**:

   (1) Less than 1 year (4) 5 to 9 years
   (2) 1 to 2 years (5) 10 to 19 years
   (3) 3 to 4 years (6) 20 years or greater _____

PLEASE DO NOT WRITE IN THIS SECTION.

CODE

6. Nature of Employment:

(1) Full-Time (permanent)
(2) Full-Time (temporary)
(3) Part-Time (permanent)
(4) Part-Time (temporary)
(5) Casual
(6) Not Employed _____

7. Geographic Region of Workplace:

(1) Eastern 1 (St. John's & Bell Island)
(2) Eastern 2 (Old Perlican, Carbonear & Placentia)
(3) Eastern 3 (Bonavista, Grand Bank, Burin, Clarenville, St. Lawrence)
(4) Central (Baie Verte, Springdale, Grand Falls, Buchans, Harbor Breton, Twillingate, Botwood, Fogo, Brookfield, Gander)
(5) Western (Bonne Bay, Corner Brook, Burgeo, Stephenville, Port aux Basques)
(6) Labrador
(7) Northern (St. Anthony, Port Saunders)
(8) Other (please specify) _____ _____

8. Educational Background: **(Circle one only, i.e. highest level)**

(1) Diploma/Certificate
(2) Baccalaureate
(3) Masters
(4) Doctorate
(5) Other (please specify) _____ _____

9. Gender:

(1) Male
(2) Female _____

10. Age in years: _____ _____

Part II: Organizational Commitment

In this section of the questionnaire we are interested in how you would rate your commitment to your present employer. It is important that you respond to all items. Please **circle the number** that best describes your present position.

Use the following scale to rate your degree of agreement/disagreement with each statement:

1	2	3	4	5	6	7
Strongly Disagree	Moderately Disagree	Slightly Disagree	Neither Disagree or Agree	Slightly Agree	Moderately Agree	Strongly Agree

		Strongly Disagree						Strongly Agree
11.	I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.	1	2	3	4	5	6	7
12.	I talk up this organization to my friends as a great organization to work for.	1	2	3	4	5	6	7
13.	I would accept almost any type of job assignment in order to keep working for this organization.	1	2	3	4	5	6	7
14.	I find that my values and the organization's values are very similar.	1	2	3	4	5	6	7
15.	I am proud to tell others that I am part of this organization.	1	2	3	4	5	6	7
16.	This organization really inspires the very best in me in the way of job performance.	1	2	3	4	5	6	7
17.	I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.	1	2	3	4	5	6	7
18.	I really care about the fate of this organization.	1	2	3	4	5	6	7
19.	For me this is the best of all possible organizations for which to work.	1	2	3	4	5	6	7

Part III: Psychological Contract Violation/Intentions

Use the following scales to rate how you feel about your organization. Again it is important that you respond to all items. Please **circle the number** that best captures your position.

20. Overall, then, **how well** has your organization fulfilled the commitments that were made to you when you were hired?

1	2	3	4	5
Very Poorly Fulfilled	Poorly Fulfilled	Neutral	Fulfilled	Very Well Fulfilled

21. Overall, then, **how often** has your employer failed to meet the commitments that were made to you when you were hired?

1	2	3	4	5
Very Infrequently	Infrequently	Neutral	Frequently	Very Frequently

22. Considering all of your job factors together, how does the amount of rewards that you actually receive from your organization **compare** to the amount of rewards that your organization promised you?

1	2	3	4	5
Much Less Than Promised	Less Than Promised	About the Same As Promised	More Than Promised	Much More Than Promised

23. Overall, how does the amount of rewards (both financial and non-financial) you receive from your organization **compare** to the amount that you think it should provide? The amount my organization supplies is:

1	2	3	4	5
Much Less Than It Should	Less Than It Should	About As Much As It Should	More Than It Should	Much More Than It Should

24. Considering the impact of downsizing/restructuring on the health care system, how likely is it that you will stay with your current employer?

1	2	3	4	5
Very Unlikely	Unlikely	Unsure	Likely	Very Likely

25. I would consider leaving my present position if another employment opportunity presented itself?

1	2	3	4	5
Very Unlikely	Unlikely	Unsure	Likely	Very Likely

26. How often have you put any serious effort into searching for a new job (e.g. checking newspapers or ads, making calls, sending resumes, etc.)?

1	2	3	4	5
Very Infrequently	Infrequently	Neutral	Frequently	Very Frequently

Part IV: Satisfaction

In this section of the questionnaire we are interested in your overall satisfaction with your job as well as select areas related to managerial restructuring within your organization. Again it is important that you respond to all items. Please **circle the number** that best describes your present position.

Use the following scale to rate your degree of agreement/disagreement with each statement:

1	2	3	4	5	6	7
Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree

General Satisfaction	Strongly Disagree						Strongly Agree
27. Generally speaking, I am very satisfied with this job.	1	2	3	4	5	6	7
28. I am generally satisfied with the kind of work I do in this job.	1	2	3	4	5	6	7
29. Most people in this job are very satisfied with the job.	1	2	3	4	5	6	7

Use the following scale to rate your degree of agreement/disagreement with each statement:

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree

Downsizing/Managerial Restructuring		Strongly Disagree					Strongly Agree
30.	I am generally satisfied with the visibility and accessibility of management personnel since restructuring.	1	2	3	4	5	6
31.	I am generally satisfied with the degree to which management seeks input on professional care standards.	1	2	3	4	5	6
32.	I am generally satisfied with the amount of information/inservice provided to help prepare me for changes related to restructuring (e.g. job responsibilities, transfer of functions, etc.)	1	2	3	4	5	6
33.	I am generally satisfied with the interdisciplinary approach to patient/client care in my organization.	1	2	3	4	5	6
34.	I am generally satisfied with the amount of time spent dealing with interdisciplinary conflicts.	1	2	3	4	5	6

Part V: Health Care Reform

In this section of the questionnaire we are interested in knowing how you view the changes that have occurred in the health care system. The content of the statements include overall impressions about the impact of health care reforms, as well as some specifics with regard to quality and safety concerns, workplace conditions, and professional issues. It is important that you respond to all items. Please **circle the number** that best describes your present position.

Use the following scale to rate your degree of agreement/disagreement with each statement:

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree

		Strongly Disagree					Strongly Agree
35.	I understand the importance of downsizing and restructuring the health care system in this province.	1	2	3	4	5	6
36.	Health care reforms have not placed sufficient emphasis on maintaining quality care standards.	1	2	3	4	5	6
37.	Patients/clients have reasonable access to health care services despite downsizing and managerial restructuring efforts.	1	2	3	4	5	6
38.	The movement towards community based care is a positive step in helping facilitate greater patient/client accountability and responsibility.	1	2	3	4	5	6
39.	Changes in the health care system have given health care providers the opportunity to gain greater control over their practice.	1	2	3	4	5	6
40.	Supplies/resources are often not adequate to ensure patient/client comfort.	1	2	3	4	5	6
41.	Despite personnel reductions, it is still possible to meet patients'/clients' basic care needs.	1	2	3	4	5	6

1 Strongly Disagree	2 Moderately Disagree	3 Slightly Disagree	4 Slightly Agree	5 Moderately Agree	6 Strongly Agree

		Strongly Disagree					Strongly Agree
42.	Because of overwhelming workload demands, it is often necessary to lower care standards.	1	2	3	4	5	6
43.	I am confident that patients/clients and family members receive adequate teaching and counselling in preparation for discharge.	1	2	3	4	5	6
44.	Due to increasing acuity levels, it is not possible to adequately assess or meet patients'/clients' emotional/psychosocial needs.	1	2	3	4	5	6
45.	I am confident that in my agency procedures are being performed in a safe and competent manner.	1	2	3	4	5	6
46.	Because of inadequate inservice education on new policies/procedures, I believe patients/clients are being placed at risk.	1	2	3	4	5	6
47.	Patients/clients are more susceptible to potential harm from delays or errors due to increased demands and stressors in the work place.	1	2	3	4	5	6
48.	Most of the time we have the necessary **physical resources** (e.g. equipment, supplies, facilities) to provide safe care.	1	2	3	4	5	6
49.	Most of the time we have the necessary **human resources** (i.e. nurses, physicians, allied health professionals, and support staff) to provide safe care.	1	2	3	4	5	6
50.	Adequate health care resources are not always available in the community for patients/clients upon discharge.	1	2	3	4	5	6

1 Strongly Disagree	2 Moderately Disagree	3 Slightly Disagree	4 Slightly Agree	5 Moderately Agree	6 Strongly Agree

		Strongly Disagree					Strongly Agree
51.	At my workplace, staff meet regularly with management to discuss workplace concerns.	1	2	3	4	5	6
52.	At my workplace, staff meet regularly with management to identify ways to resolve problems and build on strengths.	1	2	3	4	5	6
53.	At my workplace, opportunities are provided to keep current with latest developments through reading and attending workshops, inservices, and teleconference sessions.	1	2	3	4	5	6
54.	Because I feel powerless to change things where I work, it is difficult to be motivated to act as an advocate for patients/clients.	1	2	3	4	5	6
55.	Due to increased acuity and shortened lengths of stay, it is not always possible to meet professional care standards.	1	2	3	4	5	6
56.	As a consequence of recent changes in the health care system, I can appreciate the challenges facing my profession.	1	2	3	4	5	6
57.	As a consequence of recent changes in the health care system, I feel empowered to be an active participant in affirming an important future role for my profession.	1	2	3	4	5	6
58.	Because I work in a supportive environment, I am able to give that 'extra' effort when my job demands it.	1	2	3	4	5	6
59.	Due to the heavy workload in my workplace, I feel really frustrated with the reduced level of care that is provided.	1	2	3	4	5	6

1 Strongly Disagree	2 Moderately Disagree	3 Slightly Disagree	4 Slightly Agree	5 Moderately Agree	6 Strongly Agree

		Strongly Disagree					Strongly Agree
60.	Although I strive to give/ensure consistent and competent care, I rarely receive appreciation or recognition for what I do.	1	2	3	4	5	6
61.	Increased demands and stress in the workplace have led to unpleasant working relationships with co-workers and other health care providers.	1	2	3	4	5	6
62.	In the aftermath of restructuring efforts, I find that my time management skills have become more important.	1	2	3	4	5	6
63.	Increased demands and stress in the workplace have engendered a sense of disillusionment and low morale.	1	2	3	4	5	6
64.	Since restructuring of the health care system, I find my job more satisfying and challenging.	1	2	3	4	5	6

Appendix B

Reminder Letter

ASSOCIATION OF REGISTERED NURSES OF NEWFOUNDLAND

ARNN House 55 Military Road P O Box 6116 St John's Newfoundland Canada A1C 5X8
Telephone (709) 753 6040 Facsimile (709) 753-4940

MEMORANDUM

TO: **Random Selected Member**

FROM: **Association of Registered Nurses of Newfoundland**

DATE: **15 June 1999**

SUBJECT: **Questionnaire, Impact of Health Care Reforms**

Earlier this month, the Association of Registered Nurses of Newfoundland (ARNN) sent you a questionnaire on the impact of health care reforms.

This is a request that you complete the questionnaire and return it to us as your input would be greatly appreciated. Thank you, if you have already sent your response. Please call us if you need another questionnaire and we will send it to you immediately.

Thank you in advance for your response.

Your input by **28 June 1999** would be appreciated.

Appendix C

Approval from Human Investigation Committee

Memorial
University of Newfoundland

Office of Research and Graduate Studies (Medicine)
Faculty of Medicine
The Health Sciences Centre

July 27, 1999

TO: Dr. Patrick Parfrey

FROM: Dr. Verna M. Skanes, Assistant Dean
Research & Graduate Studies (Medicine)

SUBJECT: **Application to the Human Investigation Committee - #99.73**

The Human Investigation Committee of the Faculty of Medicine has reviewed your proposal for the study entitled "The Impact of Restructuring on Acute Care Hospitals in Newfoundland & Labrador".

Full approval has been granted for one year, from point of view of ethics as defined in the terms of reference of this Faculty Committee. For a hospital-based study, it is **your responsibility to seek necessary approval from the Health Care Corporation of St. John's**.

Notwithstanding the approval of the HIC, the primary responsibility for the ethical conduct of the investigation remains with you.

Verna M. Skanes, PhD
Assistant Dean

cc: Dr. K.M.W. Keough, Vice-President (Research)
Dr. R. Williams, Vice-President, Medical Services, HCC

St. John's, NF, Canada A1B 3V6 • Tel.: (709) 737-6762 • Fax: (709) 737-5033 • email: rgs@morgan.ucs.mun.ca

Appendix D

Letters of Support

HealthCare
Corporation of St. John's

10 March 1999

Dr. Patrick Parfrey
Patient Research Unit
c/o Health Sciences Centre site

Dear Dr. Parfrey:

This letter endorses your application to the Canadian Health Services Research Foundation for support for your research project entitled *"The Impact of Restructuring in Acute Care Hospitals in Newfoundland and Labrador"*.

As a regional health institutions board created in April 1995, we have merged eight organizations, introduced a program-based organizational structure and begun the process of closing several facilities including an adult acute care hospital by Spring 2000. The merger was instituted by Government to improve efficiency, and our organization implemented the other processes in order to change the infrastructure to enable improved quality of care. All three major changes, coming in a short period of time, have had an impact on each physician and staff member in our organization.

Regretably, neither time nor circumstances had allowed appropriate research prior to the implementation. The research initiatives since April 1995 have not been linked to give us enough information to evaluate the effectiveness of the three changes, nor have we been able to create an appropriate baseline of data to enable us to monitor the effectiveness of the changes on an ongoing basis. We are aware that there are no comprehensive evaluations from other provinces to assist us in our efforts. We are also aware that some provincial governments, for a number of reasons, are considering making further changes to the regional structures again without the appropriate research having been developed.

Your research proposal is therefore both significant and timely. It brings together the research studies to date and builds on them to help us acquire the information we need in order to continue to develop our governance, management and program delivery structures. Without such evidence, we will continue to make major changes either intuitively or based on the most powerful voice at the moment. Neither of the two latter approaches is justified when the changes are affecting both quality of patient care and quality of worklife for staff and physicians.

Corporate Office
Waterford Bridge Road, St. John's, Newfoundland, Canada A1E 4J8 Tel. (709)758-1300 Fax (709)758-1302 or 758-1303

We strongly endorse your research study by providing the data you require, by providing some financial and human resources to support the work, and by agreeing to share the outcomes of the study. Most importantly, we are committed to endorsing your research by using the results to strengthen our response to the health care needs of the people of our region and province.

We wish you well in your efforts to acquire the needed funding to support the research project.

Yours sincerely,

Elizabeth M. Davis, RSM
Chief Executive Officer

EMD/blp

ASSOCIATION OF REGISTERED NURSES OF NEWFOUNDLAND

ARNN House, 55 Military Road, P O Box 6116, St. John's, Newfoundland Canada A1C 5X8
Telephone (709) 753-6040 Facsimile (709) 753-4940

February 23, 1999

Dr. Patrick Parfrey
University Research Professor
Memorial University of Newfoundland, Faculty of Medicine
300 Prince Phillip Drive
St. John's NF A1B 3V6

Dear Dr. Parfrey:

I am writing to assure you of the support and assistance of the Association of Registered Nurses of Newfoundland (ARNN) in conjunction with the proposed study ***Impact of Restructuring in Acute Care Hospitals in Newfoundland and Labrador.***

As you are aware, the ARNN commissioned a study entitled *Nurses' Perception of Health Care Reforms and their Impact on the Quality of Health Care and Nursing Practice (1995).* We understand that part of the proposed current study will replicate this study and we are very pleased that this is occurring. We are prepared to work with the research team, in the manner of the previous ARNN study, making available a list of potential study participants, and other resources that may be required.

The proposed study will provide an opportunity to update the data previously collected and, more importantly, to monitor the trends that are emerging as a result of health care restructuring. As an association of registered nurses, we are acutely aware of the current pressures within our health care system. With many competing demands for scarce resources it is imperative that we, and other stakeholders in the system, have access to current and accurate data in order to determine where best to apply the available resources. The data from this study would help identify what is working and what is problematic. The ARNN will use the data to develop strategies and proposals to address the problem areas that are directly applicable to nursing. In addition, we will endeavor to inform the public and policy makers of the results of the research in order to improve health care services to the public.

Please be assured of our cooperation. We look forward to working with you on this study.

Sincerely yours,

Executive Director

GOVERNMENT OF
NEWFOUNDLAND AND LABRADOR

Department of
Health and Community Services
Office of the Deputy Minister

March 9, 1999

Dr. Patrick S. Parfrey
University Research Professor
Memorial University of Newfoundland
Faculty of Medicine
300 Prince Philip Drive
St. John's, NF, A1B 3V6

Dear Dr. Parfrey:

Re: CHSRF Research Application

The program proposed on measuring the impact of restructuring in acute care hospitals in Newfoundland and Labrador will be of compelling interest to the Department of Health and Community Services within three years. We have collaborated with your group for the past five years to obtain evidence to inform our policy making in social areas such as coronary revascularization, acute bed utilization, long term care needs, and drug utilization. We intend to continue these linkages beyond the life of this program and expect that you and your colleagues will continue to provide leadership on these issues.

The wide ranging approach with which the current program approaches the problems of acute care restructuring may develop a collaboration between policy makers, managers, employee organizations and researchers. We will support a system approach using evidence to policy making. We envision not only maintaining collaboration with your group but enhancing it.

The Department of Health and Community Services supports the proposed program very strongly and is committed to evidence based decision making.

Yours sincerely,

/ab

Deputy Minister