

**University of Alberta**

Disability Management in Organizations: Antecedents and Consequences of  
Programs and Manager Behaviours

by

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## Abstract

Disability management is a systemic process designed to improve the reintegration and return to work outcomes experienced by managers and employees. As a corporate program, disability management outcomes are generally recognized as faster employee returns to work and reduced job accommodation costs. Recognizing that these outcomes are desirable, I argue that there are gaps in our knowledge that limit our understanding of how these and other outcomes are produced. To address these gaps, I examine employee reintegration and return to work issues from a human resource management perspective and ask three direct and distinct questions. First, what are the relations between disability management programs and contextual features of organizations? Second, what are the relations between disability management programs and firm-level measures of performance? Third, what is the relation between supervisors' disability management behaviours and disability management outcomes? I answer these questions using secondary data from the Workplace and Employee Survey (Statistics Canada) and primary data from managers directly involved in employee returns to work. My findings reveal that 1) union density, high involvement work practices, and welfare practices predict the presence of disability management programs, 2) disability management programs predict organizational performance, and 3) manager behaviours partially moderate the influence disability management policies on return to work outcomes. These findings suggest that the implementation and effectiveness of a disability management program is related to the organization's contextual and strategic environment.

## **Dedication**

I extend my sincere thanks and appreciation to all the people that have helped me along my educational journey. My dissertation could not have been completed without the energetic, continuous, selfless support of my supervisors, spouse, family, and colleagues. As well, I recognize the immense efforts by the School of Business and my home department of Strategic Management and Organization to provide me with the knowledge, skill, and experience necessary to prepare and defend this manuscript.

I dedicate my thesis to my wife Sherri-Dawn, without whom I would not have had the strength to see this work through to the end. Your constant love, encouragement, and patience provided me the time and freedom I needed to navigate all the steps of the dissertation process. I am immensely grateful for your partnership on a path that was longer and further than either of us imagined. You have supported me beyond what words can convey. Thank you.

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# CHAPTER 1

## INTRODUCTION

The disability management literature clearly notes that poor management of employee absences for longer-term illness or injury cost the employer, the employee, and society in general (Dyck, 2006; Harder & Scott, 2005; MacDermid, Geldart, Williams, Westmorland, Lin & Shannon, 2008; Social Development Canada, 2005). Lost productivity, insurance premiums, staff replacement, job accommodations and other costs related to disability management draw billions of dollars from the bottom line of North American corporations each year (Boden, Biddle & Speiler, 2001). For the employee, the costs are personal, with negative implications to their work career (Czajka & DeNisi, 1988) and to their health and well-being (Keough, Nuwayhid, Gordon & Gucer, 2000). And, because corporate mechanisms reciprocate influence with broader social cultures (Morgan, 1986), the competitive individualism that forms the core of many workplaces and drives distinctions between the ‘capable’ and ‘incapable’ serves to reinforce societal biases and actions against persons with working restrictions (McFarlin, Song, & Sonntag, 1991; Oliver, 1990). Despite these costs, social biases and economic agendas still sometimes manifest in discrimination against persons with disabilities (Harcourt, Lam & Harcourt, 2005; Jones, 1997). General resolve against this form of discrimination appears the world-over and is enacted through multiple channels, including legislation and public policy, medical knowledge and practice, and organizational programs and stakeholder relations (Stiensta, 2002).



The focal point of this dissertation is organizational responses, including managerial behaviours, to issues of employee disability. Disability is a broad-ranging domain, and this research centres on the return of employees to workplaces. An employee's return to work is an excellent proving ground for the value or effectiveness of precursor legislative and medical supports (Government of Canada, 1994). It also exposes relevant organizational or managerial attitudes, and their willingness and ability to fulfill responsibilities that have been socially assigned to them (Bruyere, 2003 & 2006). In this regard, legal aspects of disability management have been investigated (Lee, 1996; Williams, 2004), as have financial (Salkever, Shinogle & Purushothaman, 2000); Sullivan, 1995), and employee attitudes and behaviours (Keough, Nuwayhid, Gordon & Gucer, 2000; Kirsh & McKee, 2003). However, the human resource management point of view has received virtually no attention in the literature. Human resource management specifically and strategically attends to performance management, learning and development, productive work environments, and employee-organization fit (Daft, 2006; Wright & Boswell, 2002) which can be easily viewed as direct correlates to disability management. To remedy this deficiency, employee return to work issues are addressed from a human resource management perspective throughout the dissertation.

Strategic human resource management is the "pattern of planned human resource deployments and activities intended to enable the firm to achieve its goals" (Wright & McMahan, 1992: 298). This definition implies maximizing the fit between business strategy and management activities in order to effectively and

purposefully manage human resources issues. Disability management is a human resource management issue because of its function to improve the overall performance of the organization through more effective responses to the employee condition needs of specific employees. It is also a focal point for other management issues such as the changing mobility needs and injury/illness issues of an aging workforce (Bruyere, 2006), attracting and retaining marginalized groups in tight labour markets (Social Development Canada, 2004), and motivating employee engagement and provision of productive effort for all employees (Cubero, 2007; Curtis & Scott, 2003). Approaching disability management as a human resource management concern provides a clear path for connecting disability as a personal limitation issue with disability as a business issue.

The research questions focus on disability management programs in organizations and the behaviours of managers in enacting those programs. Despite significant evidence that disability management programs improve reintegration and return to work outcomes for employees (Habeck & Leahy, 1991; Habeck, Hunt, & VanTol, 1998), these programs are not common to all organizations (Shoemaker, Robin & Robin, 1992). And, when implemented, do not always deliver the intended or expected results (Habeck, Scully, VanTol & Hunt, 1998). I investigate these programs in more detail to understand the contexts in which they are implemented, and the agentive role of managers in helping transform program goals into positive reintegration and return to work outcomes.

Three distinct questions about disability management in organizations drive the research (Figures 1.1 and 1.2). First, what are the relations between disability

management programs and contextual features of organizations? Organizations are generally advised that disability management programs reduce costs and support society. And while organizational characteristics relate to variations in program policies (Williams, Westmorland, Shannon & Amick, 2007), it is not presently clear if such characteristics also relate to the presence of whole programs. Second, what are the relations between disability management programs and firm-level measures of performance? Although disability management programs have been shown to speed employee returns to work and save organizations money, linkages of these programs to other forms of competitive advantage have not yet been examined. For example, Westmorland & Buys (2004) repeat Masengarb's (1994) conjecture that disability management programs result in greater firm productivity, however, to my knowledge these assertions remain unsubstantiated. Investigating this relationship aids our understanding of reasons that organizations implement disability management programs. Third, what is the relation between supervisors' disability management behaviours and disability management outcomes? Work, and subsequently, disability management activities occur in a social environment. The role of supervisors in creating effective management contexts for employees to reintegrate and return to work should be fundamental to achieving desirable outcomes. These questions do not converge on central topic. Rather, they address different aspects of the same theme: organizational issues in disability management, and together highlight employee disability as an issue deserving greater strategic management attention.

The literature and background drawn upon to answer the above research questions is outlined in this introductory chapter. The chapter is organized as follows. First, I conclude the introductory section by providing a definition of disability management, articulating the scope of my research, and clarifying my usage of key terms. Second, the literature and reference points that inform the research are summarized. Third, disability management in organizations and the importance of manager behaviours in relation to disability management processes is explained. Finally, the contents and contributions of the remaining chapters in this dissertation is outlined. Together, the four chapters identify knowledge gaps in the disability management field and produce information and evidence to fill those gaps.

### **Disability Management and Research Scope Defined**

Disability management is the proactive management of processes that “control the personal and economic costs of workplace injury and disability” (Shrey, 1995: 5). It is an organized, systemic response to issues of employee disability, and a deliberate and proactive effort to minimize the occurrence and cost of injuries and illnesses (Akabas, Gates & Warren, 1996). A comprehensive program for disability management combines all pre-event, at-event, and post-event initiatives (Sullivan, 1995). This means that an effective disability management program works to help prevent injuries and illnesses from occurring in the first place, respond quickly with supports when they happen, and help employees reintegrate and return to work after their recovery.

The research questions are examined from an organization and management-centered view of the issues. The focus is on the person responsible (i.e. manager) for

both effective implementation of disability management practices and their outcomes, and on the organizational forces that support or impede these activities (i.e., nature of policies, presence of programs). Providing input evidence from the managerial or organizational side of the equation is fundamental to a balanced understanding of the organizational system (versus insurance or medical patient system) that comes in to play when addressing employee reintegration and return to work issues.

Two additional parameters shape the scope of my research. First, I focus on the post-event initiatives of disability management. These are the initiatives that work to facilitate and support the reintegration and return to work of employees after an illness or injury. Approaching disability management in this way enables me to concentrate on issues that may be distinct from accident prevention and general occupational health and safety, and allows me to address issues that can be lost from view in a broader perspective. This perspective also better supports the inclusion of non-accident or non-work injuries or illness that necessitate prolonged employee absences, work accommodations, and reintegration and return to work efforts (e.g., diseases associated with aging, pain, chronic conditions, and mobility issues).

Second, the research does not intend to speak to the new employment of persons with existing or developmental disabilities. Although similar issues of job accommodation and work group integration exist, the issues of prior working relationships, stakeholder interactions, and the implications for managing absences may be different for this group than employees already entrenched in the organization. While the findings of the studies will subsequently speak to a smaller

part of disability management, these limitations help to center the research questions on areas that are quite important but receive less attention in the disability management literature.

The terminology employed is consistent with the broader literature. However, some terms are frequently interchanged and it is important to clarify their meanings up front. The first set of terms relates to the processes undertaken to help an employee recover from an injury or illness and reintegrate back into the workplace. Throughout, these processes are described as ‘disability management,’ ‘reintegration’ and ‘return to work’. These are taken to refer to the same thing – helping to bring the employee back into the organization. The second set of terms describes corporate directives for how disability management should proceed in the organization. Most often use the term ‘policies’ is used, but ‘program’ and ‘procedures’ are interchanged from time to time. These all refer to a formalized or deliberate plan of action for addressing employee reintegration and return to work. Finally, a set of terms is used to describe the actors involved in disability management on an organization’s behalf. Predominantly, the term ‘manager’ is used to specify the interpersonal interaction between the employee and the organization. In many cases, this is the superordinate-subordinate relationship. And, in a preferred state of disability management in organizations, the manager would have a direct a role in helping return an employee to work. However, sometimes this role is shared with or sourced to another player, such as a rehabilitation specialist or human resource professional that oversees or manages the reintegration process. Thus, the use of the term manager is inclusive of these other players as long as they are directly

employed by the organization and not a private contractor. When clarity is required to localize the actor as part of the supervisory dyad and the not the broader inclusion, the specific term 'supervisor' is applied.

### **Literature Review**

Attention to organizational issues of disability can be linked to the disability rights movement of the 1970's (Johnstone, 2001). This movement increased awareness of life issues for persons with disabilities, including their employment and inclusion in the labour market. From this movement, laws such as the Canadian Charter of Rights and Freedoms of 1982 or the Americans with Disabilities Act of 1992 were passed to prohibit employers from discriminating against qualified disabled applicants in the terms and conditions of their employment (Lee, 1996; Lynk, 1998). Subsequently, considerable research about the impact of disability-related legislation on businesses and the outcomes experienced by persons with disabilities became produced (Bruyere, Erickson, & VanLooy, 2003).

There appears to be two prominent lines of research in disability studies. One line addresses issues of the employment of persons with disabilities in general, and the other line attends to the return to work of persons that developed or acquired disabilities during the course of their employment. My research draws upon the return to work line of enquiry. To review this literature, I conducted a thorough search of the Business Source Complete database, finding over 22,000 references related to disability issues, including over 3,500 academic articles (Table 1.1). Generally speaking, these works focus on disabled employees as a population subgroup. For example, books and philosophical articles cover topics about the social

perceptions and injustices in Western society (Oliver, 1990) and around the world (Mayhew, 2003; Steinstra, 2002). Studies delve in the medical nature of rehabilitation (cf. Krause, Frank, Dasinger, Sullivan & Sinclair, 2001), legal compulsions (Lee, 1996; Stone & Williams, 1997), and industrial relations frameworks that shape disability management practices (Armstrong & Greckol, 1999). And, models are presented to explain factors that impact how persons with disabilities are treated in the workplace (Jones, 1997; Stone & Colella, 1996). In general, the return to work of employees with disabilities is clearly a well-published topic.

Recently, contributions to the disability management literature have worked to understand disability issues from a more managerial perspective. For example, a few studies describe the stages of disability rehabilitation and employee reintegration and return to work (Thomason, Burton Jr, & Hyatt, 1998) and show linkages between disability management policies and procedures and disability management outcomes (Amick III, Habeck, Hunt, Fossel, Chapin, Keller, & Katz, 2000; Habeck, Scully, VanTol, & Hunt, 1998). These works show that there are principles and practices of disability management that are transferable across organizations. For example, we know that implementing disability management policies and practices in general helps employees return to work faster (Habeck & Leahy, 1991). We also know that disability management practices are associated with lower rates of employee disabilities and recidivism (Lewin & Schecter, 1991) and manager training in disability management is important to achieving good outcomes (McLellan, Pransky & Shaw, 2001). However, we do not yet understand why these relationships



exist and how they combine to achieve the goals of disability management in organizations.

In spite of this growing body of research on disability management in an organizational context, issues of organization and management for the supervisors of persons returning from illness or injury are not well documented. For example, of the titles retrieved in the above search, about 1% of the academic articles were published in top-tier business journals (Table 1.2). And, across the entire disability management literature few works attend clearly to management issues or focus on the actions of the manager in disability management. Of those publications that attend to management issues three themes of enquiry emerge. First, there is the study of job accommodations and manager or co-worker resistance to making the work environment changes that enable the returning employee to work productively (Colella, 2001; Florey & Harisson, 2000; Lee, 1992). Second, there is the study of legal compulsions upon managers for managing disabled staff fairly. For example: selection decisions (Harcourt, Lam & Harcourt, 2005; Stone & Williams, 1997), job analysis (Brannick, Brannick & Levine, 1992; Mitchell, Alliger & Morfopoulos, 1997), and performance and reward evaluations (Colella, DeNisi, & Varma, 1997 and 1998). Third, there is the study of management exchanges and interactions between supervisors and employees that influence the outcomes of the return to work process (Colella & Varma, 2001; Friesen, Yassi & Cooper, 2001; Larsson & Gard, 2003; Nieusenhuijsen, Verbeek, de Boer, Blonk, & van Dijk, 2006). Together, these themes of enquiry begin to explain the management side of disability management.

Of these three themes of enquiry, the study of management exchanges and interactions is the least developed. Only a few articles and other references in the disability management literature speak directly to supervisor-employee interactions in disability management. For example, through empirical work Colella & Varma (2001) note that managers with higher quality exchange relationships with disabled employees are better able to recognize the quality of employees' performance. And, through qualitative research, Larsson & Gard (2003) show that managers want to provide better quality communication and interaction with returning staff and feel that this will improve the quality of return to work processes. Finally, the importance of having good communication and meaningful supervisory exchanges are reinforced by evidence from a handful of studies showing that quality relationships, clear social and process support, and general acceptance at the workplace are all significantly related to positive disability management outcomes (Bricout, 2003; MacKensie, et al., 1998). However, because of paucity of research in this area, we are still limited in our understanding of the dynamics of interactions and interplays between supervisors and employees that lead to desirable disability management outcomes.

Finally, the relative infancy of research into organizational and management issues for employees reintegrating and returning to work is indicated not by what is in the literature, but what is not. Missing from the literature are contributions that overview the state of research on management-related disability issues to date (e.g., an annual review), suggest broad frameworks for understanding disability management in organizations, or call into question the assumptions and biases that

underpin much disability-related research. And, despite an understanding that about 30% of organizations have chosen to implement a disability management program (Marsh Risk Consulting, 2003), and that the nature of programs vary between organizations (Dyck, 2006) there is not yet a clear understanding of which types of organizations implement programs, and why. Lastly, it is not clear if the results described in the literature (which are primarily produced in the United States of America) are applicable or transferable across national contexts and legal frameworks. This is an important point, particularly when considering that Shrey and Hursh (1999) note that there are significant differences in how disability management issues are addressed by legislation in Canada and the United States, and that American legislation more closely represents that of Germany than of Canada (National Institute of Disability Management and Research (1997). Further, for a variety of reasons, including values of individualism versus collectivism (Milaney, 2002) and colleague attitudes (versus senior management) towards supporting disability management practices (Westmorland & Buys, 2004) the philosophical and practical approaches to the reintegration of employees to workplaces may be different across national contexts. .

Each of these examples of difference or contraction point to the importance of conducting disability management research that it is sensitive to or reflective of its national context. Thus, while there is a working assumption in the literature that disability management at the organizational level universally presents the same managerial issues and evokes the same attitudes, biases, and responses from supervisors across national boundaries, there is not yet clarification of the role of

legal and systemic frameworks on disability management in the managerial context. In sum, the literature on the nature, content and performance of disability management programs in organizations provides valuable and insightful information, yet is still taking its first developmental steps.

### **Summary**

Ensuring the effective return to work of employees has the potential for significant gains and reduction of costs for employers, employees, and general society. My research focuses on the post-event initiatives that organizations and managers take to help employees come back to work after recovering from their injury or illness. Specifically, I investigate the relations between disability management programs and contextual features of the organization, relations between disability management programs and firm-level performance outcomes, and relations between manager behaviours and disability management outcomes. A review of the literature indicates that despite broad knowledge about disability issues, there is a clear need for more understanding and better knowledge about disability management in organizations and how organizations and supervisors actually manage this subset of employees.

In forthcoming chapters I investigate these issues further. However, before moving forward in the research it is necessary to provide additional background information about disability management in organizations.

### **DISABILITY MANAGEMENT IN ORGANIZATIONS**

The reintegration and return to work aspect of disability management programs is realized in the policies and practices that help employees come back to

their job after prolonged illness or injury. These activities range from work hardening schedules (i.e. medium duty work, part-time work) until the employee is ready to perform the full role, to insurance and compensation processes that support the employee's financial freedom to rehabilitate and recover properly, to re-orientation to the workplace efforts that help the employee re-learn the goals of the organization and how they fit in the workplace (Dyck, 2006; Thomason, Burton Jr, & Hyatt, 1998). Harder & Scott (2005) identify in their disability management model that there is an array of participants that contribute to achieving employee reintegration to the workplace. One of the identified participants is 'management'. There are two main persons in this group. Generally, the supervisor is responsible for interpreting the work limitations of the employee and setting duties for the employee to perform, monitoring their performance, and creating an appropriate work environment for the employee's return. In some organizations these roles are separate, and in other organizations they may overlap - particularly in smaller organizations if limited resources are given to disability management activities.

Three main issues emerge when performing disability management activities. The first is the difficulty in achieving desirable outcomes. The second is determining who is actually accountable for the results. The third is ambiguity of appropriate or effective manager behaviours. Each of these issues is discussed next.

### **The Difficulty in Achieving Desirable Outcomes**

In principle, returning an employee to work is simple: when the employee is deemed medically ready to return to work the organization makes the recommended temporary job accommodations or duty changes that enable the employee to

gradually become productive in their job. However, in practice it is difficult because disability management brings together an incredible confluence of policy, professional practice, personal perspective, and contextual constraint (King, 1998). What often appears in the literature as a matter of procedure and protocol to reintegrate and return injured and ill employees to the workplace is, in fact, a nuanced and highly contextual interplay between participants in the process (e.g., employee, unions, doctors, employers) and the factors that shape those relations (see Table 1.3 for examples of common participants and their roles). And, often because of privacy legislation, trust issues, stigma concerns, or other barriers to effective communication, crucial information does not always flow from one participant to the next (McFarlin, Song & Sonntag, 1991). For example, Florey and Harrison (2000) found that good past performance was an important part of successful employee returns to work, while Colella and Varma (2001) suggest that employee ingratiating behaviours were beneficial, and Williams (2004) suggests that the employee's social connections in the workplace are an important factor. These examples show that employee reintegration is not a straight forward matter. Ultimately, the processes of disability management looks like a network of 'black boxes' connected by the needs and interests of the employee but where each participant conducts activities that are largely unbeknownst to the rest. Consequently, the sheer magnitude of disability management and the complexity of participant relationships and responsibilities make it difficult to do well.

## **Accountability for Disability Management Outcomes**

In many organizations the human resource division/staff is generally charged with the responsibility of ensuring effective and proper use of management practices to motivate and organize the work of employees (Anthony, Perrew & Kacmar, 1999). This responsibility extends over several broad domains, from facilitating employee relations to compensation negotiations to recruiting and selecting staff. Yet, despite these roles, helping to manage employee disabilities does not usually appear on general or traditional lists of human resource responsibilities.

Anecdotally, I have observed that disability management programs are generally affiliated with the pay and benefits unit, the finance division, or the administrative services function in the organization. If this pattern is consistent across organizations, the conceptual alignment and functional space allocation of disability management professionals away from other human resource management professionals may explain commonly-voiced negative comments by employees in the disability management processes. For example, Friesen, Yassi, and Cooper (2001) report that employees are often frustrated by poor levels of communication, being treated as a number or as a cost (not as a person or productive employee), and have difficulty obtaining accommodations to their work environment. While more alignment to the human resource function is unlikely to uniformly solve all these problems, it does serve to highlight that the main concern should be the ability of the employee to work and contribute to the organization, not the cost of their accommodations or their drain on the insurance plan.

The connection between human resource management and disability management centres, and thus providing a rationale for to apply human resource perspectives and resources, is that both invariably represents a coming together of issues that center on the employee – employer relationship and the maintenance of that relationship (Dyck, 2006; National Institute of Disability Management and Research, 2003; Shrey, 1998). In the same way that budget and costing issues are dealt with in the accounting field, employment-related issues are the purview of human resource management. And, evidence is beginning to accumulate and show that the social context of the work environment is an important issue in disability management (Colella & Varma, 2001; Friesen, Yassi & Cooper, 2001; Larsson & Gard, 2003). Once the employee has been designated as medically ready to return to work, the important factors in their reintegration are the quality of the relationships with co-workers, social support, and general acceptance at the work place (Bricrout, 2003; MacKensie et al., 1998). These factors all point at employee attitudes, biases, and interactions.

Aligning disability management with the human resources function is supported through a practical assessment of the thrusts and intentions of each practice. To make this match I rely upon comparisons to a list of eight dimensions of human resource management prepared by Tsui and Milkovich (1987) and key functions of disability management described by Dyck (2006) and that National Institute of Disability Management (2003). The comparisons are presented in Table 1.4, and it is clearly evident that the methods of disability management are consistent with the general intentions of human resource management. In the same way that



human resources often takes a lead role in guiding and addressing issues of group behaviours and group dynamics (e.g., employee relations) it is evident that there is a parallel responsibility for human resources to create accepting environments and influence behaviours in the social relations between supervisors and the returning employee. Thus, although rarely discussed in the literature, the natural home for studies of disability management in the organization is in the human resource management domain.

Discussing disability management as a function of human resources provides for a more clear linkage between the objectives of these programs and the delivery of desirable outcomes. Making this alignment, though, does not absolve managers of their responsibilities in helping employees return to work. Instead, it reinforces that disability management is a process of people management, not asset management, and thus directly a fundamental task of supervisors. Earlier, I described that the role of supervisors in disability management is to manage or shape the work environment so that the employees can effectively reintegrate and return to work. However, there is evidence that employees and employers can be quite dissatisfied with their disability management experiences (Kirsh & McKee, 2003; Larsson & Gard, 2003). In the final part of this section I explain why it can be difficult for managers to create good quality interactions in disability management and outline two theories that help to explain the quality of these interactions.

### **The Ambiguity of Appropriate and Effective Manager Behaviours**

Dyck (2006) describes the role of disability management programs as providing an umbrella over several shared needs of the employee and employer. For

example, disability leave insurance programs provide for the income needs of employees and the financial risk management needs of employers. Or, by specifying the management practices that will be used to support the employee's return to work, the employee's need for job security and role information are met alongside the employer's need for the return of an employee only when they are healthy, ready, and able to perform their role. However, while clear and strong interpersonal communication, supervisory expectations, and relation-building exchanges are included in Dyck's umbrella analogy, these management exchanges are wanted but absent from many return to work experiences of managers and employees (Gates, 2000). This is surprising because both employees and supervisors indicate desires for these kinds of exchange (Gard & Larsson, 2003; Larsson & Gard, 2003).

It is reasonable to expect that the desired positive interactions are partially created and supported by the performance of disability management behaviours by supervisors. The absence of such behaviours may be attributed to several reasons. One reason is that there is little authoritative or prescriptive reference to which organizations or managers can point to as inducement or incentive to ensure that good quality supervisor-employee interactions are an integral part of their disability management efforts. Instead, much of the published research concerns itself with the medical nature of employee rehabilitations, or on correlates between programs and outcomes without delving into the managerial contexts in which these results are obtained (Cubero, 2007).

Another reason is that disability management is a very difficult and complex set of processes for managers to oversee, with many personal and non-personal

factors that come together to influence how they help employees reintegrate and return to work (King, 1998). For example, there are organizational-level factors such as organizational culture and policies, and personal-level factors such as personality and past experiences that potentially impact how their duties are performed. And, because of stigma around disability (Jones, 1997) and often limited medical information (e.g., receiving a prognosis not a diagnosis), it can be difficult for managers to discuss disability and work limitation issues openly with employees. In short, managers must often navigate unfamiliar terrain and address medical (e.g., physician), financial (e.g., insurers), and legislative (e.g., duty to accommodate) issues with incomplete information and sometimes conflicting messages from their organization or their personal beliefs. In this turbulent context, maintaining strong relations during employee reintegration and return to work process presents considerable challenges for managers.

To understand the behaviours that managers should perform in disability and why those behaviours can be expected to produce positive results it is necessary to discuss disability issues with a theoretical perspective. Because disability management happens in an interactive context it is appropriate to enquire about the relations that shape that context (Friesen, Yassi, & Cooper, 2001). Further, disability management requires an understanding of disability as a biological, psychological, and sociological construct and thus requires thought and theory that blends together these academically diverse foundations (Akabas, Gates, & Gavin, 1992). Two types of theories drawn from the organizational behaviour literature seem particularly relevant to explaining the behaviours of managers in disability management and thus

the quality of employee-employer interactions. These theories are summarized here, and presented in more detail in the coming chapters.

*Strategic Human Resource Management.* Strategic Human Resource Management is an amalgam of perspectives and lines of research that establish the linkage between the people of the organization and the strategic interests of the organization (Boxall, 1992; Martell & Carroll, 1995; Wright & McMahan, 1992). Dressed in issues of the vertical and horizontal alignment of human resource management practices in the organization, this perspective provides for the strategic use of people and programs as contributors to firm performance. In many cases, this approach means addressing structural and programmatic issues, but involves modifying employee skills, attitudes and behaviours in order to achieve strategic goals (Schuler, 1992). Thus, Strategic Human Resource Management provides a strong background for expecting that human resource systems and management policies and procedures influence manager behaviours, and for understanding the role of manager behaviours in producing disability management outcomes that aligned with the interests of the organization. In Chapter 2, this theory is drawn upon to explain how disability management programs are expected to align to firm strategies and human resource practices that promote the inclusion and positive valuation of employees in organizational operations.

*Social Exchanges.* Social exchange theories such as organizational support theory (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Rhoades & Eisenberger, 2002) and organizational justice theory (Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Greenberg, 1987) help to explain social interactions in organizations.

Specifically, both theories provide a suitable lens for examining the structures and mechanisms of this policy – manager – outcome relationship and help explain why the behaviours of managers matter in what is often seen as series of medical rehabilitation processes. These theories suggest that the behaviours of managers create work environment contexts and shape interpersonal relationships between managers and employees. If the reintegration of an employee is understood partly as a social process then it is reasonable to expect that management practices have some influence on aspects of employee returns to work. And, that higher quality interactions create better management contexts than lower quality interactions. For example, some studies reveal that fair and supportive behaviours by managers are associated with faster rates of employees returning to work and the better quality work relationships upon the employee's return to work (Gard & Larson, 2003; Larson & Gard, 2003; Nieuwenhuijsen, Verbeek, de Boer, Blonk & van Dijk, 2006). These theories are taken up in Chapter 3 to specifically test for relations between manager behaviours and disability management outcomes.

### **Summary**

Disability management is an important and useful set of practices that helps employees return to work after an injury or illness. In many organizations, a disability management specialist provides expert guidance and direction to the process and the supervisor works to manage the working environment and make accommodations to the employee's job or role as required. The return to work process is difficult to do well because there are many procedures, participants, and information or communication limitations inherent in the process of complex

interactions. Unless managers take clear and proactive steps to create good supervisor-employee interactions, both the manager and the employee may experience less than positive results from the experience.

## **CHAPTER SUMMARIES**

The purpose of my research is to answer calls for better understandings of organizational and management issues in reintegrating and returning employees to work (VanTol, 1998). The remainder of my dissertation is organized into three chapters. Individually, these chapters provide key pieces of information to my research questions, and together inform the different aspects of the return to work process.

In Chapters 2 and 3, I describe the results of two empirical studies that examine relations between organizational features, disability management programs, disability management behaviours, and return to work outcomes. Drawing on data collected by Statistics Canada, in the first study (Chapter 2) I perform an analysis of firm-level factors with likely relation to the presence disability management practices in organizations. I also examine the relationship between disability management programs and firm-level measures of performance. The questions addressed in this chapter are real contributions to the literature as they are novel, and the sample from which the results are drawn is representative of organizations across Canada.

The second study (Chapter 3) is a web-based survey of individuals responsible for disability management activities in their respective organization to assess the antecedents and consequences of their behaviours. Specifically, I focus directly on the relationship between policies and procedures, managerial behaviours,

and employee return to work outcomes. This chapter provides clear empirical evidence for understanding the opportunities and circumstances of manager behaviours when attending to disability and reintegration issues.

The exploration of the three research questions: a) alignment of disability management programs, b) relations of disability management programs with firm performance, and c) relations of policies, behaviours, and disability management outcomes do not directly converge upon a specific topic. Rather, they independently inform aspects of organizational responses to disability issues. Because of limited theoretical or empirical information in the disability management literature, the research in both chapters is conducted using exploratory analyses of the data. Conclusions drawn from these analyses subsequently help to inform future research and deductive analyses.

In the final chapter of my dissertation (Chapter 4) I revisit the research questions and summarize the findings of the studies. In addition, I set out paths for future research, and comment further upon organizational and managerial issues in disability management. As a package, my research provides a clear response to the calls for enhanced organizational and contextual research in the disability management field. This dissertation represents new thinking in the field, and provides strong basis for additional theoretical discovery by researchers and informs strategic and operational activities of organizations.

**TABLE 1.1**  
**Results of Database Search using Thesaurus Terms for Disabilities**

<b>Thesaurus Term</b>	<b>Total Articles</b>	<b>Academic Articles</b>	<b>% of Academic Articles per Term</b>
Employee Fringe Benefits	17632	2220	13%
Employment Discrimination	1049	570	54%
Leave of Absence	1057	189	18%
Insurance, Disability	1369	172	13%
Vocational Rehabilitation	186	109	54%
Employment Re-entry	136	60	44%
Labour Laws and Legislation	98	58	59%
Employment Benefits	193	53	27%
Disability Retirement	157	38	24%
Employees with Disabilities	124	31	25%
Employee Injuries	110	26	24%
Return to Work	49	20	41%
Handicapped – Employment	5	3	60%
Insurance, Disability – Policies	14	2	14%
Temporary Disability Benefits	6	1	17%
Worker's Compensation	3	0	0%
<b>Total</b>	<b>22188</b>	<b>3552</b>	<b>16% (Average)</b>



**TABLE 1.2**  
**Disability Management Articles in Top Business Journals**

Publication Title	Number of Disability Management Articles
Academy of Management (incl. Journal, Review, and Executive)	10
Administrative Science Quarterly	7
Human Resource Management Review	11
International Journal of Human Resource Management	5
Journal of Applied Psychology	9
Journal of Management	4
<b>Total</b>	<b>46</b>
<b>Percentage of Academic Articles (Total = 3552)</b>	<b>1.3%</b>

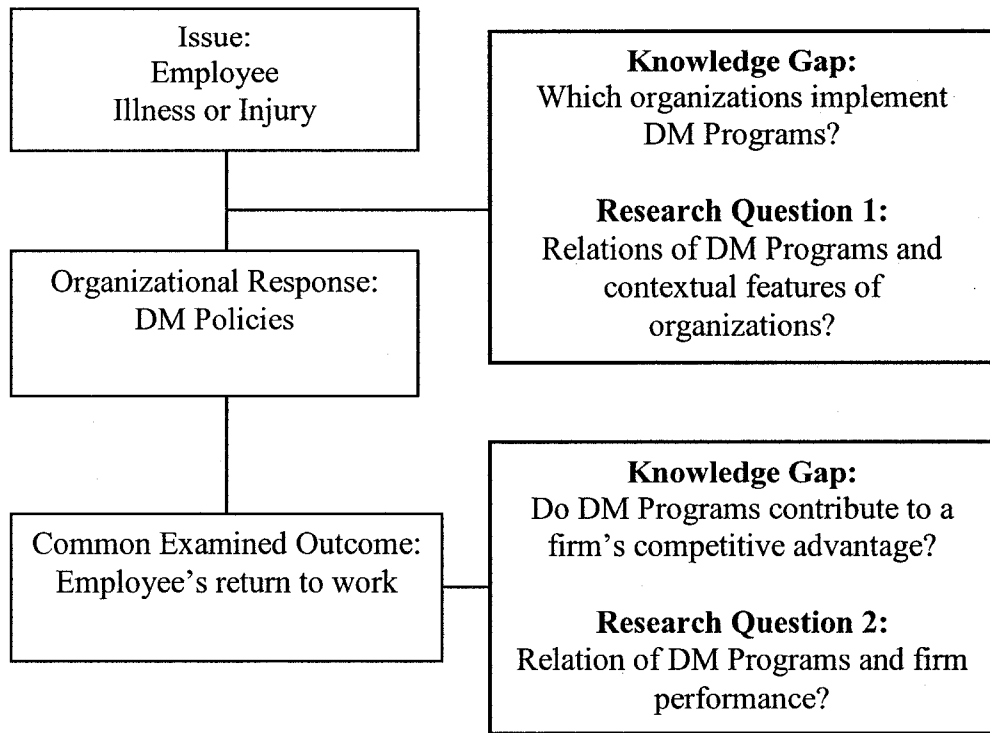
**TABLE 1.3**  
**Major Stakeholders in Disability Management**

<b>Stakeholder</b>	<b>Example Role</b>
Employee	<ul style="list-style-type: none"> <li>- Receive treatment for illness or injury.</li> <li>- Participate in programs or activities to return to work and reintegrate in the workplace.</li> </ul>
Organization	<ul style="list-style-type: none"> <li>- Provide policies and practices to prevent injuries and illness.</li> <li>- Coordinate and liaise with other stakeholders to minimize costs of employee disabilities and maximize reintegration and return to work outcomes.</li> </ul>
Disability Management Professionals	<ul style="list-style-type: none"> <li>- Provide professional consulting to organizations for the implementation and operation of disability management programs.</li> </ul>
Union	<ul style="list-style-type: none"> <li>- Maintain and advocate for the rights of the injured or ill employee.</li> </ul>
Medical Community	<ul style="list-style-type: none"> <li>- Diagnose the employee's injury or illness and provide medical (physical and psychological) and rehabilitative services to the employee.</li> </ul>
Insurance Community	<ul style="list-style-type: none"> <li>- Minimize the organization's compensation liability for employee absences.</li> <li>- Bridge employee earnings and cost of living needs during absences from work.</li> </ul>
Government	<ul style="list-style-type: none"> <li>- Set legislative or regulatory parameters for the rights of persons with disabilities.</li> </ul>

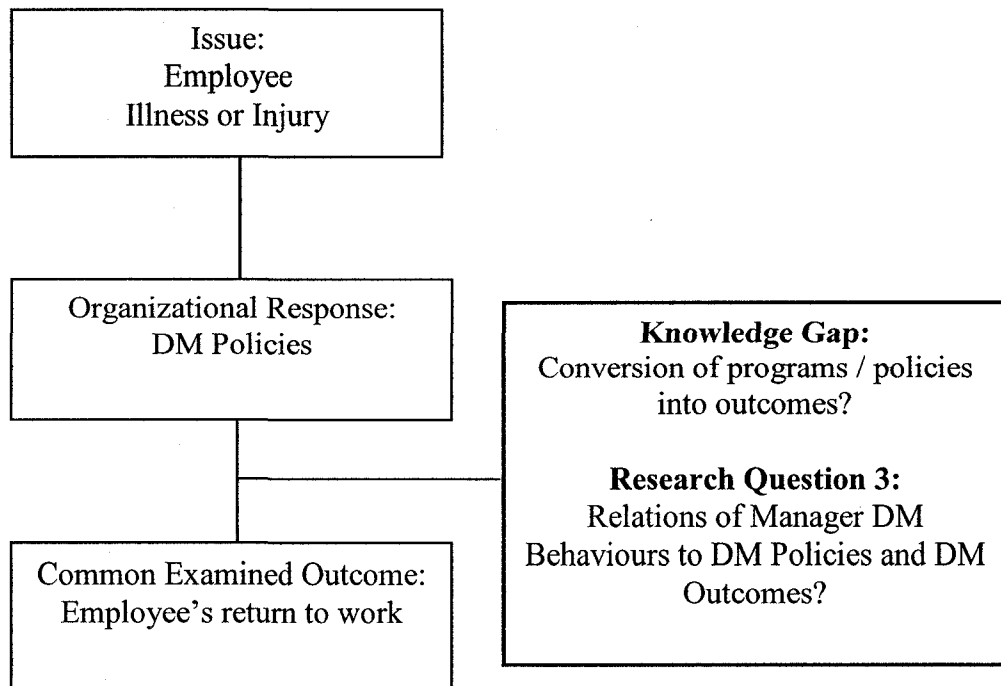
**TABLE 1.4**  
**Comparing Disability Management and Human Resource Management**

<b>Dimensions of Human Resource Management</b>	<b>Methods of Disability Management</b>
1. Administrative Service	<ul style="list-style-type: none"> <li>• Re-orientation Programs</li> <li>• Process Management</li> </ul>
2. Compensation	<ul style="list-style-type: none"> <li>• Long-term / Short-term Disability Benefit Plans</li> </ul>
3. Policy Adherence	<ul style="list-style-type: none"> <li>• Mission Statements</li> <li>• Policy Statements and Objectives,</li> <li>• Dispute Resolution Methods</li> <li>• Compliance Mechanisms</li> </ul>
4. Legal Compliance	<ul style="list-style-type: none"> <li>• Commitments to (a) Information Privacy provisions, (b) Anti-discrimination Legislation, and (c) Workers Compensation Acts</li> </ul>
5. Employee Support	<ul style="list-style-type: none"> <li>• Employee Assistance Programs</li> <li>• Commitments to Psychological Health and Social Interventions</li> </ul>
6. Organization and Employee Development	<ul style="list-style-type: none"> <li>• Vocational Rehabilitation</li> </ul>
7. Staffing / HR planning	<ul style="list-style-type: none"> <li>• Job Accommodations</li> <li>• Job Redeployments</li> </ul>
8. Labor Relations.	<ul style="list-style-type: none"> <li>• Joint Labour – Management Committees</li> </ul>

**FIGURE 1.1**  
**Knowledge Gaps and Research Questions**



**FIGURE 1.2**  
**Knowledge Gaps and Research Questions**



## CHAPTER 2

### INTRODUCTION

Disability management programs are shown to speed the rate of employee returns to work, decrease recidivism, reduce the administrative costs of employee absences, and increase compliance with legislative requirements (Dyck, 2006; Lee, 1996; Hall & Hall, 1994; National Institute of Disability Management and Research, 2003). Yet, a few studies show that program implementation rates are stable at about 30-40% of organizations (Marsh Risk Consulting, 2003; Shoemaker, Robin & Robin, 1992). Based on these findings, it is apparent that we need to know more about the decision context in which organizations choose to implement disability management programs is appropriate (Matt & Butterfield, 2006). Specifically, what is required is a discussion of organizational contexts and the role they play in giving rise, shape and purpose to these programs. The research in this chapter contributes to that discussion by presenting a large scale examination of disability management programs in Canadian organizations.

Two distinct questions drive the research presented in this chapter (Figure 2.1). First, I ask: What predicts the presence of disability management programs in organizations? This question is examined in two parts. The first part looks at the number of organizations in Canada that implement disability management programs. Many estimates of program implementation are based on statistics and surveys from the United States of America, and given differences in legal, financial / insurance, and medical frameworks between Canada and the United States of America (Milaney, 2002; Shrey, 1996) a Canadian perspective is a relevant and valuable

addition to the literature. In addition, the tendency of disability management survey publishers to extrapolate upon relatively small sample sizes makes it valuable to verify the findings in a sample that statistically relates to the broad population of organizations in Canada. The second part looks at relations between disability management programs and organizational characteristics, business strategies, and management programs to identify contingencies that may create barriers or synergies that correspond to the implementation of a program.

For the second question I look at business level outcomes and ask: What is the relationship between disability management programs and organizational performance? Most of the return to work research to date views the employees return to work as the final outcome. However, identifying the nature and structure of correlates between disability management programs and organizational performance may inform discussions of the strategic value of these programs and their contributions to organizational profits and/or social responsibility interests. Together, these two questions draw out information that improves our understanding of contextual factors around organizations and disability management (Johns, 2006) and subsequently clarifies disability management in organizations.

Answering the above questions should contribute make the following contributions. First, an examination of the contextual picture of organizations and disability management expands the narrow scope of view that characterizes many studies of disability management issues. While the research attends to only a few possibilities, the results increase our understanding of the fit of disability management programs with management strategies and practices and structural

features of organizations. Second, this work responds to the call for improved theorizing and conceptual work in disability management research from a management and organizational perspective (Stone, Stone & Dipboye, 1992; VanTol, 1998). Through research that rests upon established management principles I provide a practical introduction of theory into a typically non-theoretical domain.

### **THEORETICAL AND CONCEPTUAL BACKGROUND**

The research questions asked in this chapter enquire into areas of disability management that are relatively unexplored. These issues present competing alternatives and empirical relations are examined to determine 'best fit' answers to the questions. As there is little direct theory on disability management in organizations grounds for suggesting relations between variables is drawn from related management thought and logical understandings of management programs in organizations. Taken together, the findings and related principles help to inform further theory development in the disability management field. This section begins with a discussion of the first research question and the organizational contexts that relate to implementation of disability management programs in organizations. Then, the second research question is addressed through a discussion of the relationship between disability management programs and organizational performance.

#### **The Presence of Disability Management Programs in Organizations**

Presently, the literature does not discuss the organizational factors that relate to the presence of disability management programs in organizations. To inform this discussion, I look at the issue from two perspectives. First, the relations between these programs and several structural characteristics of the organization are



examined. Second, the relations between disability management programs and business strategies and other management programs are examined. These theoretical perspectives help to inform a profile of organizations that implement programs.

*Linkages to Organizational Characteristics.* Organizations vary from each other in a number of systemic ways (Hrebiniak, Joyce, & Snow, 1989). These differences explain the purpose and function of organizations' internal systems and the methods and practices used to achieve desired outcomes (Burns & Stalker, 1961; Child, 1972). Seminal works from Pugh, Hickson, Hinings & Turner (1968) and Prien and Ronan (1971) identify several primary characteristics of organizations, and numerous studies since have expanded the scope of characteristics and tested their relations with organization design principles, human resource systems, and organizational performance (Atwater, 1995; Hrebiniak & Snow, 1980; Keats & Hitt, 1988; Milne & Blum, 1998; Mintzberg, 1983). From these works, four organizational characteristics are selected that seem to have the most relevance or potential for relationships to disability management programs: industry, size, age, and union density. These variables are expected to reveal structural and contextual patterns in the implementation levels of disability management programs. Relations for each characteristic with disability management programs are discussed next.

Industry "refers to a distinct group of productive or profit-making enterprises" (Jackson & Schuler, 1995: 251). One common approach to categorizing industry groups is the simple classification of firms into service or manufacturing industries (Batt, 1999; Bowen & Schneider, 1988; Bowen, Siehl, & Schneider, 1989; Frenkel, 2000; Levitt, 1972; Levitt, 1976). Key differences between service

industries and manufacturing industries include the tangibility of products, customers' presence requirements, and sequence of product creation and consumption (Bowen, Siehl, & Schneider, 1989). In service industries, the product is often intangible, and requires the customer to be present to simultaneously receive and consume the service as it is being produced (e.g., hair salon). In manufacturing industries, the product is a hard good, often produced without the customer present, and consumed by the customer after production (e.g., beverage producer). The relationship of industry to disability management is discussed according to these two industry categorizations.

There is evidence that industry is a potent explanation for variation in the adoption and implementation of management policies (Frenkel, 2000; Hunter, 2000; Ichniowski, Shaw, & Prennushi, 1997; Ordiz & Fernández, 2005). This is because “the way of managing human resources is a direct function of the capacities required within the organization” (Ordiz & Fernández, 2005: 1351). Further, that “in contrast to goods-producing activities, service work involves primarily symbolic interaction – interchanges with other people that convey intangibles” (Frenkel, 2000: 469). Simply put, manufacturing industries emphasize production through capital equipment, and service industries emphasize production through its employees, and thus require different approaches and methods of management. It is presently unclear whether disability management programs are more common in service or manufacturing industry firms. Although accidents seem to occur more frequently in manufacturing firms, the standardization of processes and emphasis on equipment may discourage initiatives like return to work programs that seek flexibility from the

organization in order to accommodate the personal needs of employees. In contrast, in service firms the employee and their personal qualifications and abilities are more closely linked to the organization's productivity (Ordiz & Fernández, 2005). Thus, service organizations have greater vested interest in reintegrating and returning employees to the workplace rather than hiring permanent replacements.

Consequently, it is relevant to investigate the relationship of these industry categories and disability management programs.

The size of an organization is the number of people in the organization, and the age of organization is the number of years that it has been in operation. To date, no research directly explores the relationship between disability management programs and size or age. However, several management studies show relationships between larger size and more mature organizations with more complex and broader ranging policies (Brewster, Wood, Brookes, & Van Ommeren, 2006; Kaman, McCarthy, Gulbro, & Tucker, 2001). The primary explanations are that a) more complex management systems gain efficiency when more employees are involved (Barber, Wesson, Robertson, & Taylor, 1999), and b) larger and more mature organizations have the resources necessary to codify practices and procedures (Baron & Kreps, 1999), and regulate or enforce program compliance (Klass, McClendon, & Gainey, 2001). Consequently, it is reasonable to anticipate that firms with greater size and age have better resources and capacity to address issues of employee disability, particularly job accommodations, than smaller and younger firms. However, as the relationship between age or size of the organization and the

presence of disability management programs has not been empirically tested, it is important to conduct these assessments.

The organization's union density is the degree to which its workforce is represented by a certified union. It is presently unclear whether unions influence the presence of disability management programs in organizations. The most direct tie between unions and organizations' disability management policies and procedures is the unions' legal responsibility to help ill or injured employees return to work (Armstrong & Greckol, 1999). Consequently, many unions seek to influence policies and procedures, through collective bargaining or joint-labour management committees, to satisfy their obligations to legislation and their employees (Dyck, 2006). Density of unionized members is a key consideration as collective bargaining impacts the practices in an organization for unionized employees, but also for non-unionized employees (Jackson, Schuler, & Rivero, 1989). Greater numbers of unionized employees should correspond to greater similarity in management practices across the organization as the marginal costs of operating separate policies and procedures for union and non-union staff likely becomes larger with a greater rate of unionization. Subsequently, organizations without a union may be able resist paying formal attention to disability management issues, but increasing rates of unionization should enhance the presence of disability management policies in the organization. However, while unions have accountability for the protection of its members, there are economic and organizational factors that may supersede or counteract the influence of unions on the presence of disability management programs. For example, organizations in regions with low unemployment rates, or

requiring high firm-specific knowledge and skills may implement disability management programs as a competitive strategy regardless of unionization or union influence. Consequently, the relations between disability management programs and union density cannot be assumed and requires further investigation.

*Linkages to Business Strategies and Management Programs.* The interests and intentions of an organization towards its staff is reflected in its management style and practices (Schuler, 1992). Whether the organization is focused on order versus flexibility, employee output versus input, or systemic similarity versus individual uniqueness is apparent in the type of management programs it implements (Koch & McGrath, 1996; Osterman, 2000). These programs provide structure and guidelines as to how the employee should be managed in order to meet organizational goals and objectives (McMahan, Virick, & Wright, 1999; Wright & McMahan, 1992).

Management programs are implemented as planned activities, functions, and processes intended for attracting, developing, and maintaining a firm's human resources (Lado & Wilson, 1994). By extension, this means that the implementation of a disability management program is an active decision - the organization intends to achieve particular results through the program. The Strategic Human Resource Management perspective suggests that management programs have an assumed consistency of internal practices within the system (McMahan, Virick, & Wright, 1999; Wright & Boswell, 2002). This consistency is seen in two forms of alignment: vertical and horizontal. Vertical alignment refers to a connection or similarity with higher management principles, such as the broad management strategy of the firm (e.g., invest in capital versus invest in people). Horizontal alignment refers to a

connection or similarity with other management programs (e.g., training and development, compensation practices). Given the planned nature of many management programs and the general desire for both forms of alignment, the presence or absence of a human resource management program should be reflective of the organization's overall approach to managing its staff (Schuler, 1992).

Organizations are not required to have the same management programs. Although features of the workforce or labour market make some practices more desirable at certain times (e.g., retention programs in a tight labour market), in most cases a contingency view of management programs is appropriate (Arthur, 1992, Lepak and Snell, 2002). That is, an organization should implement management practices that best fit its social and operational environment in accordance with its own goals and outcome intentions. Organizations should do what is right for them and their situation, and not necessarily what others are doing. In light of this strategic view of management programs, the presence of disability management programs should be more likely in organizations where there is vertical alignment to the broader management approach and where there is horizontal alignment with other human resource management programs. In this way, the entire system around the disability management program is working together to express consistent interests and achieve similar outcomes. To explore these issues of alignment further, the vertical alignment of disability management to firm strategy is presented next and is followed by a discussion of horizontal alignment to management programs.

The executive leaders of an organization make a number of strategic choices that shape the organization's path and fate (Andrews, 1971; Child, 1972).

Specifically, they determine the direction and allocation of resources that enable organizational goals to be achieved (Hambrick & Finkelstein, 1987; Weiner & Mahoney, 1981). By extension, they exert influence on the presence or absence of a disability management program in the organization by establishing the importance or priority for the outcomes of a disability management program. That is, if the goals and intentions of a disability management program were inconsistent with the performance strategies of the organization, then it is not logical for the executive group to permit such a program to drain internal resources away from more preferred programs.

Thornhill, White and Raynor (2005) suggest that central to many strategy typologies is an 'inward focus' or 'outward focus' (Miles & Snow, 1978; Porter, 1980). An inward focused business strategy is more likely to support processes that maximize efficiency and effectiveness by reducing unnecessary cost factors and inconsistent production or performance methods (Shepeck & Militello, 2000). Firms pursuing an outward-focused business strategy implement management practices which sustain and reward creativity, encourage dynamic thinking, and inherently strive to create change – both internal to the company and in the marketplace (Delery & Doty, 1996; Miles & Snow, 1984; Porter, 1980). For both types of performance strategy there are reasons for and against an alignment to disability management programs in organizations.

With respect to an inward focus, greater employee familiarity or experience with the organization, its business processes, and their assigned role all contribute to increased operating excellence (Anthony, Perrewe & Kacmar, 1999). Retaining

employees with existing experience in their role or in the organization is more efficient than incurring redundant or unnecessary search, selection, and training of costs associated with hiring a replacement employee. And, desire to retain employee knowledge and abilities could be a significant reason to implement a disability management program. However, job accommodations are frequently part of an employee's return to work. Inherently, accommodations are changes to standard operating procedures – making the job fit the person instead of the person fit the job. Consequently, when operating excellence is highly pursued it may be that the organization resists implementing disability management programs in order to maintain standardized operations. Thus, disability management programs, particularly those with a focus on job accommodations for employees, have both cost-saving and cost-incurring (i.e. disruption to operations) implications for the organization.

The outward focused performance strategies also have potential alignment with disability management programs. Firms with such business strategies must possess the capability to be flexible and respond to changes, including flexibility in the composition or structure of their workforce (Lepak, Bartol, & Erhardt, 2005). Disability management programs usually necessitate a 'holding pattern' until the employee completes their return to work process and thus limit the flexibility and adaptability of the organization's workforce. Subsequently, organizations with outward focused business strategies may see less value in operating disability management programs. However, in contrast, a growth-oriented business strategy inherently recognizes that concepts and products take time and effort to develop. In



these terms, an employee's return to work may be more easily accommodated because a) there is less immediate time-demand pressure on employees, and b) there is philosophical understanding in the organization that longer-term gains are more important than shorter-term gains. Thus, disability management programs, particularly those with a focus on maximizing the potential of employees, may help or hinder an organization with an outward growth strategy.

In light of the above firm strategy discussion, the relationship between disability management programs and firm strategy is not certain. And, Thornhill, White and Raynor (2005) suggest that it is unlikely that a firm has 'strategic purity' or only an internal or external perspective. Consequently, it necessary to empirically investigate the relationship between both forms of strategy and the presence of disability management programs in organizations.

Organizations use human resource programs and practices as mechanisms for communicating broad goals, priorities, and behavioural requirements to employees (Jackson & Schuler, 1995; Schneider & Bowen, 1985). Through these programs managers and employees receive messages for how they are expected to behave, the resources and supports available to them to perform work, and the outcomes they can expect for their input and effort. For example, recruitment and selection programs make it clear which professional qualities are important in the organization, training and development programs illustrate the nature and importance of various skills sets, and performance management and compensation programs help direct work and reward the achievement of goals. Disability management programs similarly send messages to staff. However, it is not clear what message is being sent. On one hand,

disability management programs may indicate a compliance perspective where the motivation to implement a program is to ensure adequate defence against legal imperatives or moral norms for employee returns to work. On the other hand, disability management programs may indicate that the employee as a person is valuable and important to the organization- that the employee brings something to the organization that is unique – in their contributions or skill set that cannot be fully or easily replaced

There is considerable research that shows that horizontal alignment between management programs creates synergies and enhances the effectiveness of the programs (Ichniowski & Shaw, 1995; Ichniowski, Shaw & Prennushi, 1997; MacDuffie, 1995). It may be that disability management programs are aligned to the other management programs in the organization, and thus create synergies or mutual supports when matched appropriately. Subsequently, it is relevant to examine the relationship of disability management programs to other programs in the organization.

Two types of management practices that may have alignment with disability management programs are welfare supports, such as health insurance, and high involvement work practices. Both sets of management practices are discussed below, and if found to be related to disability management programs may inform the compliance versus well-being intentions of disability management programs.

Indirect pay such as life and accident insurance, pension plans, and medical programs constitute a significant expense for organizations (Gerhart & Milkovich, 1992). Two reasons that organizations offer employees this form of compensation

are desires to a) protect the financial security of employees and help protect them from adversity, and b) reinforce a particular management strategy (Long, 2005). Both of these rationales suggest opportunity for alignment between disability management programs and indirect pay practices. However, while there is a logical connection between the income support functions of disability management programs and welfare supports, it is not clear if disability management programs are implemented as part of a particular management strategy or a general and genuine interest in the wellbeing of the employee. Consequently, in addition to evaluating relations between welfare supports and disability management programs it is relevant to determine the relationship of disability management programs with employee supportive management programs. Assuming that disability management programs are structured to retain the skills and abilities of employees (versus compliance only), one management approach that may align with these programs is high involvement work practices.

High involvement work practices are premised in the idea that the knowledge and unique capabilities of employees are the “most strategically important of the firm’s resources” (Grant, 1996: 110). There is little consensus about which specific management practices are considered high involvement (Guthrie, 2001). But, there is a general understanding that such practices encourage job and non-job specific training, teamwork, job and role flexibility, information sharing, and bigger-picture thinking in the organization (Zatzick and Iverson, 2006). Together, these practices represent a “system of management practices giving their employees skills,

information, motivation, and latitude and resulting in a workplace that is a source of competitive advantage” (Guthrie, 2001: 181).

Baird (2002) suggests that because high involvement work practices require greater psychological investment and connections between employees and their work, there are important reciprocal obligations for employees and organizations. On the one hand, employees are expected to work beyond the traditional confines of a job description, understand the work of others in the organization, and give fully of themselves to support the more fluid nature of a team-based work environment. On the other hand, organizations are expected to provide greater benefits and incentives for employees to make these investments. Disability management programs can be seen as one of these benefits for participating in a high involvement work practice environment. Following this perspective, disability management programs may be understood by employees as a safety-net for themselves in addition to a cost-saving vehicle for their employer. Consequently, employees receive a complete message from the organization that their current work is valued, but also that the organization values their future contributions enough to establish a program to help them recover from illness or injury and return to work. In this way, high involvement work practices and disability management programs both help to form psychological bonds with employees and encourage employees’ identification with the organization. This is similar to the message delivered by these practices with respect to general occupational health and safety issues (Zacharatos, Barling & Iverson, 2005).

The above discussions present grounds for suggesting relationships between the presence of disability management programs and several organization-related features. Next, I present the theoretical background that supports a relationship between disability management programs and organizational performance.

### **Organizational Performance and Disability Management Programs**

Disability management programs are a deliberate attempt to recover the productive capacity of an employee when the employee is unexpectedly removed from the workplace because of an injury or illness (Dyck, 2006). The value of disability management programs in this context is attributed to the program's role in saving organizations money by returning the employee to work and thus minimizing the costs such as insurance premiums and payouts as well replacement employee selection and training costs (Shrey, 1995; Shrey & Hursh, 1999). However, framing disability management programs only in the cost-saving context limits our understanding of the strategic and value-adding nature of these programs.

Management practices in most organizations reflect the economic, social, and cultural context in which the organization operates (Strand, 1983; Child, 1972; Andrew, 1971). In recent years, pressure for change, innovation, and growth has required many organizations to re-examine if and how their human resource management programs fit in their organization and contribute to its overall performance (Zatzick and Iverson, 2006). Organizations find that in order to succeed in this new environment they must move past more traditional management methods of hierarchy and control and rely upon more open systems of employee involvement and engagement in fundamental work tasks (Whitener, 2001). Ironically, at the same

time that organizations are more fully relying upon engaged and empowered employees to drive organizational performance, the nature and availability of the workforce is shifting and making it more difficult for firms to capitalize on their human resources (Drucker, 1999). For example, demographic changes in the labour market are related to evolving general expectations of workers about 'work' and work-life balance (Burke, 2000), and shortages in skilled professional areas are making it difficult to find and retain quality employees (Greenhouse, Parusuraman & Collins, 2001). Furthermore, these effects are combining to inflate the wages of employees and also reduce the margins and tolerance that organizations have for workforce turnover (Statistics Canada, 2007). A net effect of these changing environmental conditions is that the value of employees as an organizational resource is becoming increased (Wright, Dunford & Snell, 2001).

In a strategic human resource management context, disability management programs may relate to organizational performance. There are at least two views on the program - performance relationship. On the one hand, disability management programs may influence organizations' performance by helping employees to become more healthy and productive for the organization (Gornick & Blair, 2005). Additionally, disability management programs may be a strategic tool for helping an organization compete in the marketplace. This is because employees are an important part of an organization's competitive advantage (Barney, 1991 and 1995; Barney & Wright, 1998; Wright, Dunford & Snell, 2001). Competitive advantage partly rests on the organization's "idiosyncratic and difficult-to-imitate resources" (Teese, Pisano & Shuen, 1997: 513), and employees with firm-specific training,

considerable in-role experience, and commitment to the organization are a formidable competitive asset for the organization (Wright, Dundford & Snell, 2001). In short, high involvement work practices enable employees to make greater contributions to organizational performance by becoming more embedded and integrated into the strategic and decision-making aspects of their work.

Disability management programs may relate to organizational advantage and performance for three reasons. First, they may increase the effectiveness and efficiency of employees returning to work and better preserve and recover the employees' business and job knowledge and thus limit the amount of re-learning and reorientation the employee requires to the workplace. Second, in relative terms, if an organization only has to pause to help an employee return to work rather than stop, hire, and train a full replacement, it may have greater revenues and less management costs per employee. Third, if an organization provides the employee with accommodations to their role or work environment (e.g., supportive equipment, more frequent rest periods), the employee may produce at a higher rate than without the accommodations. However, it is important to note that disability management programs may also reduce organizational performance. While there is not presently data to indicate the marginal labour costs associated with disability management programs, related social-oriented programs (e.g., racial diversity programs) have been shown to add up to 10% to the organizations operating costs per year (Riccuci, 1997). Consequently, it is relevant to evaluate the relationship between disability management programs and firm productivity.

On the other hand, this relationship may be viewed from the perspective that organizational performance may influence the existence or function of disability management programs. That is, more productive firms may have greater resources to implement these programs than less productive firms. This perspective echoes or is reflective of the Welfare Capitalism model of business strategy (Jacoby, 1997) which suggests that organizations provide non-monetary compensation, such as health care and employee assistance programs, to help improve the quality of life for their employees (Maiden, 2005). This view point is consistent with general trends in disability issues that show socialist-leaning countries provide more supports to persons with disabilities than capitalist-leaning countries (Mayhew, 2003; Stienstra, 2002). As disability management programs cost money to implement and draw upon administrative resources, it may be that only more productive firms have the capacity to implement these programs.

If there is a relationship between disability management programs and organizational performance and these programs influence productivity, this relationship may also be moderated by the organization's other management practices and performance strategies (Guthrie, 2001; Huselid, 1995; Long, 2005; MacDuffie, 1995; Zatzick & Iverson, 2006). Disability management programs may have greater or lesser effect when coupled with different levels of high involvement work practices, or inward / outward focused performance strategies. For example, disability management programs may enhance organizational performance in organizations with many high involvement work practices as the programs help reinforce to employees that they are individually valued and thus support the



engagement of employees in their work. However, this message may have significantly less impact when there are few high involvement work practices and the unique capacities of each employee are valued less by the organization. An example of interaction with performance strategies is that for organizations highly focused on maximizing internal effectiveness (e.g., through standardization and mechanization) disability management programs may reduce overall performance because job accommodations for employees require flexibility that the system cannot incorporate efficiently (e.g., frequent rest breaks on an assembly line).

Presently, it is not clear what relationship disability management programs have with organizational performance, nor the potential implications of these programs in interaction with peer programs and performance strategies.

Consequently, these interactions will be explored further through the analyses of data.

### **Summary**

Throughout this section possible linkages between disability management programs and organizational characteristics, firm strategy, management practices, and performance have been discussed. If there are relations between disability management programs and organizational characteristics it may be possible to create profiles of organizations that are, or are not likely to implement these programs. The role of disability management programs in supporting organizational productivity has not yet been empirically examined in the literature. However, grounds for suggesting that there may be relations between disability management programs and productivity is premised in conceptual frameworks (Gornick & Blair, 2005) and

related fields such as workforce reduction (McKinley, Zhao & Rust, 2000; Osterman, 2000; Zatzick and Iverson, 2006) and employee training and development (Tannenbaum, 1997; Salas and Cannon-Bowers, 2001) and performance management (Long, 2005; Pfeffer, 1998). If a positive relation exists, it may provide support for advocates of programs. If a negative relation exists, it may explain the low implementation rate reported in the literature. In the next section, I discuss the methods and measures that I use to explore these linkages more closely.

## **METHODOLOGY**

The methods and measures used to analyze the data and produce answers to the research questions are outlined in this section. It begins with a description of the sample data and collection procedures. As the data is drawn from the Workplace and Employee Survey (WES) additional information about the product and benefits and limitations of using the survey as a secondary data source is included in the description. Then, the variables examined in the analyses explain how they are measured are presented. An outline of the strategy for analyzing the data concludes the section.

### **Sample and Data Collection**

The data for this study was made available by Statistics Canada through the Workplace and Employee Survey (WES) product. Because of the reliance upon this third party data set and the nature of the product itself, it is relevant to discuss the WES in detail. In the following paragraphs I introduce the WES and elaborate upon specific features of the data used in this study.

*WES Introduction.* The WES is a relatively unique product, operating at a level of sophistication and national scope attained by only a handful of countries (Statistics Canada, 2006). It is administered annually in two alternating cycles of variables, permitting both cross-sectional and longitudinal analyses. The power and utility of the WES is derived from two key features: 1) it is nationally mandated, administered, collected, and protected, and 2) it collects and supports a linkage between two sets of data (a) the Workplace Survey (completed by organizations) and (b) the Employee Survey (completed by employees). Consequently, researchers can connect changes in business strategy to adjustments in organizational practices, and both of these with employee outcomes for absence rates, wages, and satisfaction. Furthermore, these relationships can be tested and understood with a strong degree of confidence.

The instrumental role of Statistics Canada in the development, delivery, tabulation, and protection of the WES produces assurances for completeness and accuracy of the data. Further, the data for the WES is collected from a large sample of private sector organizations and their employees which may otherwise not respond to independent research requests. The estimated organization population represented by the WES 2001 sample is greater than 650,000 firms, representing 10 provinces across 252 strata – industry (14), region (6), and size (3). The questionnaires contain over 600 variables that address a diverse set of topics, including human resource management practices, business strategies, firm and employee demographics, and employee perceptions of the organization. Employers are sampled by physical location with a senior level official responding to the survey. Employees are

representatively sampled from employer provided lists. Respondents are followed for approximately four years, further enhancing the validity and consistency of the data. In light of the above, it is clear that the WES product can be a significant resource to management researchers.

*This Study's Data.* This study is based on data from the 2001 WES cycle. At the time of the study, this cycle contained the most current data on variables relevant to the study, including measures of disability management programs, high involvement work practices, and productivity. The primary respondent for the Workplace Survey is the Human Resource Manager, or in smaller organizations the general manager or business owner. For larger organizations, multiple respondents were requested in order to enhance the validity of specific data (e.g. financial information) as well as to address potential issues with multi-collinearity and common method variance (Patak, Hidioglou & Lavallo, 1998). The Employee Survey is completed by a random sample of employees in each organization (up to eight per organization), with these respondents engaged year-over-year to produce longitudinal data.

All variables in this study were drawn from the Workplace Survey, except for the disability management program variables. As the Workplace Survey did not contain data on disability management programs this information was linked from the Employee Survey. The process of linking Employee Survey disability program variables include steps for recoding, aggregating, and exporting, which are discussed in more detail in the measures section. Statistics Canada anticipates the need, and supports the process required to perform the above linking procedures for various

workplace practices, recognizing that at times “workers can provide more reliable and detailed data on these variables than can workplace level respondents” (Statistics Canada, 2006: 5). Consequently, the linking approach is an accepted and statistically valid method of acquiring needed variables by transferring data from one survey to the other.

Statistics Canada carefully manages the sample population by setting cut-off points for sample sizes within the each of the 252 aforementioned strata. In 2001, the Workplace Survey targeted 10,815 firms, with a response rate of 85.9%, and usable data from 6,207 organizations. An estimation procedure is also undertaken to calibrate the sample population weights according to known population totals at the industry / region level. This procedure helps increase the generalizability of the findings across the nation

To meaningfully examine the research questions in this chapter it was necessary to reduce the sample size by removing those organizations for which there was missing data for key dependent variables. After these reductions, the sample size became 1,386 firms representing approximately 78,000 firms across the strata.

### **Measures**

Most variables in this study have been recoded or reclassified from their original presentation in the data set. A discussion of these changes is included in the description of measures below.

*Disability Management Program Measures.* Two types of disability management programs are measured. The first program, DM Programs (Job Accommodations), indicates whether organizations provide equipment or assistive

devices to help employees with disabilities perform their work. The second program, DM Programs (Career Growth), indicates whether organizations provide disability management programs that support and direct the careers of persons with work limitations through training and other promotional opportunities. Although the employment and accommodation types of programs fall within the general rubric of disability management (Shrey & Hursh, 1999; McMahon, 1999; Budkiewicz, 1998; Salkever, Shinogle & Purushothaman, 2000; Schwartz, Watson, Galvin & Lipoff, 1989), and have a significant bivariate correlation ( $r = .41$ ;  $p < .01$ ) they are analyzed separately as they conceptually focus on different aspects of disability management.

Both measures of disability management programs are imported from the Employee Survey and the presence of each type of disability management program is aggregated from the responses of sampled employees. For DM Programs (Job Accommodations), the questions asks employees that require accommodations “Does your employer provide these altered facilities, equipment or aids to you?” For DM Programs (Career Growth), the Employee Survey questionnaire asks “Does your employer have any recruitment or career programs for employees with disabilities?” For both questions, employee response categories include (a) Yes, (b) No, (c) Not Applicable, and (d) Don’t Know. As mentioned in the sample and data collection section, three steps are required to construct the disability management program variables. First, employee responses in the Employee Survey data set indicating positive responses were recoded as 1, negative response were recoded as 0, and all others as ‘missing’. Second, employee results were aggregated for each

organization, creating organizational scores between zero and the maximum number of respective responding employees (usually 4-6 employees per organization). Another recoding of the scores resulted in organizations with at least one employee indicating the presence of a disability management coded as 1 and all others as 0. This approach to categorizing the presence of the programs is appropriate as I would not expect all staff to know that a program exists, but if a program exists it is reasonable to expect that it applies to all staff. Third, this computed variable for the Employee Survey is exported to the Workplace Survey data set. Thus, the measure of each disability management program in the organization is that at least one employee in the organization affirmed its presence.

*Organizational Performance.* The measure of organizational performance used in this study is based on the general lead of Datta, Guthrie & Wright (2005) and Zatzick and Iverson (2006). Productivity is calculated as revenues per employee minus salary costs per employee. The four questions that contribute to these variables are as follows. Revenue: "What was the gross operating revenue from the sale or rental of all products and services for this location?" Salary Expenditures: "What was the total gross payroll for all employees at this location." Non-salary Expenditures: "What was the total expenditure on non-wage benefits at this location?" Total Employees: "How many employees receiving a T4 slip were employed at this location?"

*Firm Strategy.* Two strategy variables are constructed from fifteen questions in the survey. The questions ask participants to indicate the importance of several facets of their workplace's general business strategy, including "Increasing

employee's skills," "Increasing employee involvement / participation," "Undertaking R&D," and "Reducing labour costs". Participants responded on a six point scale from "Not Important through Crucial." The two constructed strategy variables of operating excellence and external growth, are based on principal components factor analyses with varimax rotation. Following the advice of Tabachnick & Fidell (1996) items were allocated to factor groups using .40 as a cut-point condition for inclusion in the respective factor group (see Table 2.1 for strategy factor loadings). Although three factors were produced through this analysis, the third factor did not meet the generally accepted scale reliability coefficient of .70 (Chronbach, 1951) and thus was not included in the study. The Cronbach alpha scores for scale reliability are: operating excellence (.73), external growth (.81), and labour costs (.51). This approach to developing strategy variables is similar to other authors using the WES (Thornhill, White and Raynor, 2005).

*High Involvement Work Practices.* While measures of involvement human resource practices vary considerably, they draw upon a similar body of management practices (Datta, Guthrie & Wright, 2005; Way, 2002). For example, a typical high involvement workplace includes training, teamwork, employee involvement, incentive compensation, and two-way communication (Guthrie, 2001; Lawler, 1992; Pfeffer, 1998). The WES asked respondents to indicate whether the following six management practices existed on a formal basis in their organization during the previous 12-month period: flexible job design, information sharing with employees, problem-solving teams, self-directed work groups, gain sharing, and formal training. The high involvement work practices were measured on a dichotomous scale (1 =



Yes; 0 = No). And, as the prevalence and impact of high involvement management practices can be more clearly measured by structuring them into an index (MacDuffie, 1995; Pil & MacDuffie, 1996), high involvement work practice bundles were created by summing the scores for each of the six practices. The scale had good internal reliability (Cronbach alpha = .77), and is similar in composition and internal reliability to a similar scale used by Zatzick and Iverson (2006).

*Welfare Supports.* Several items in the workplace survey represent non-monetary compensation practices consistent with the indirect pay and welfare capitalism business approach. These include the provision of severance, pension plans, life insurance, health care insurance, and employment insurance top-ups for maternity leaves. These supports were measured on a dichotomous scale (1 = Yes; 0 = No). Factor analysis of the measures reveals a single item factor structure (Table 2.2) with a Cronbach alpha scale reliability coefficient of .81. To determine if welfare supports were distinct items from the disability management programs variables and high involvement work practices variable, I also performed a factor analysis of the five welfare support items, both disability management program measures, and the six high involvement work practices items included. The results indicate a three factor structure with disability management programs, high involvement work practices, and welfare supports as clearly distinct from each other (Table 2.3).

*Organizational Characteristics.* Several variables were used to assess relations between disability management programs and characteristics of organizations. Specifically, I examined workplace size (number of employees),

union density (percentage of employees covered by collective bargaining agreements), industry (dichotomous variable for manufacturing and service industries), and workplace age (number of years at the same location).

### **Analytic Strategy**

Two components of the analytic strategy to test for variable relations are explained in this section: the statistical package and statistical method. In the Sample and Data Collection segment above, I discussed the context in which the data is collected and administered by Statistics Canada. One of the complications for analyzing the population-weighted Workplace Employee Survey is that most common statistical packages are incapable of conducting the complex weighting procedures required by Statistics Canada (i.e. bootstrapping). Sufficiently complex software packages are made available in the secured computer laboratories (e.g. WesVar 4.2).

The relations outlined earlier in the chapter call for statistical evidence. Two types of regression models are used to test for relations between variables. First, logistical regression models are used to test for the likelihood of disability management programs in organizations, and the likelihood of productivity influencing disability management programs. This approach is best for analyzing data where the dependent variable is dichotomous (Agresti, 2002). Second, linear regression models with the ordinary least squares approach is used to test for the influence of disability management programs on firm productivity. Taking a least squares approach enables the fitting of a line to the data that minimizes the sum of the squares of the residuals from the regression line (Abdi, 2003). This means that

the regression line represents a best fit scenario for the data based on the overall placement of the line relative to the actual data points for each case. In each of the regression models the variables are standardized and centred (i.e.  $M = 0$ ,  $SD = 1$ ).

## **RESULTS**

In this section I present the results of the empirical analyses that assess the relationships discussed earlier in this chapter. I begin with an outline of the descriptive statistics and conclude with the findings of the regression analyses.

### **Descriptive Statistics**

The frequency of the two types of disability management programs are presented in Table 2.4. Consistent with prior research (Marsh Risk Consulting, 2003) these results show that about 43% of organizations have at least one form of disability management program. It is most common for implementing organizations to have both types of programs (35% of all organizations), followed by DM Programs (Job Accommodations) as a solo program at 8% of all organizations and DM Programs (Career Growth) as a solo program at 3% of all organizations.

Means, standard deviations, and correlations among the study variables are presented in Table 2.5. Two sets of variable relationships are reviewed in more detail. First, the relationships between disability management programs and each of variables for firm strategies, management programs and practices, and organizational characteristics. Second, the relationships for organization performance and disability management programs.

The first set of relationships provides some insight into the contextual features of organizations that relate to the presence of disability management

programs. The results show that while several contextual variables relate similarly to each of the disability management programs such as Welfare Supports with DM Programs (Job Accommodations) ( $r = .18, p < .01$ ) and DM Programs (Career Growth) ( $r = .04, p < .01$ ) there are also several different relationships. For example, DM Programs (Job Accommodations) has a positive relationship with Operating Excellence ( $r = .06, p < .01$ ) and DM Programs (Career Growth) has a negative relationship ( $r = -.09, p < .01$ ). The result is opposite for the External Growth strategy as there is negative relation to DM Programs (Job Accommodations) ( $r = -.17, p < .01$ ) and a positive relation to DM Programs (Career Growth) ( $r = .08, p < .01$ ). And, DM Programs (Job Accommodations) have a positive relationship with firms in the manufacturing industry ( $r = .13, p < .01$ ), DM Programs (Career Growth) have a negative relationship ( $r = -.03, p < .01$ ). In addition, while there are relationships between each of the predictor variables, none of them are of significant magnitude to suggest issues of multicollinearity (Jobson, 1991). The correlation results show that disability management programs are related to each of the variables examined in this study, but that some of the relations differ depending on the type of disability management program.

The second set of correlations help to answer the third research question by suggesting relationships between firm productivity and disability management programs. I find that both DM Programs (Job Accommodations) and DM Programs (Career Growth) have significant and positive relations with productivity per employee ( $r = .12, p < .01$  and  $.17, p < .01$ , respectively). These results suggest that

the presence of disability management programs in organizations is related to the organization's level of productivity.

### **Regression Analyses**

Based on the pattern of correlations described above it is reasonable to expect that regression analyses of the data will provide further insight into the research questions. Logistical regression models were developed and tested for each of the disability management program variables to answer the questions of contextual predictors of disability management programs. Appropriate regression analyses were performed to test the competing perspectives for program – performance relations. The findings of these analyses are now presented.

*Contextual Variables and Disability Management Programs.* The results show that several features of organizations predict each type of disability management program (Table 2.6). In logistical regression, Exp (B) indicates the odds or probabilities of the dependent variable in relation to the independent variable (Agresti, 2002). A score of 1.00 means that there is no influence of the independent variable, a score of less than 1.00 means that the dependent variable is less likely, and a score of greater than 1.00 means that the dependent variable is more likely. Further, the direction and magnitude of the variable is indicated by the B coefficient, the significance of each variable in the model is given by the Wald statistic (similar to p-value), and although there not a direct measure of variance explained by model in logistic regression (i.e.,  $r^2$ ), the Cox-Snell is a pseudo-  $r^2$  measure (Freese & Long, 2006). In separate tests of models for organizational characteristics, performance strategy, and management practices I found that some variables were better

predictors of disability management programs than others. For DM Programs (Job Accommodations) the results show that this type of program is predicted by union density (Exp B = 1.53, B = .41, Wald = .01), operating excellence strategy (Exp B = 2.51, B = .92, Wald = .02), external growth strategy (Exp B = .58, B = -.55, Wald = .02), high involvement work practices (Exp B = 2.39, B = .87, Wald = .02) and welfare supports (Exp B = 1.44, B = .53, Wald = .02). Workplace size, industry, and age did not significantly impact the odds of an organization having a disability management program. Additionally, the Cox-Snell Likelihood statistic shows that while the union density, both performance strategies, high involvement work practices and welfare supports are each significant in the predicting the presence of a job accommodation program, they also do not explain a lot of the variance in the adoption of these programs.

The results for DM Programs (Career Growth) are similar but not the same. This type of disability management program is predicted by union density (Exp B = 1.85, B = .62, Wald = .05), industry (Exp B = 0.69, B = -.37, Wald = .03), and high involvement work practices (Exp B = 1.29, B = .25, Wald = .01). In contrast to the other disability management program results, neither type of business strategy predicted a career growth disability management program. Workplace size and age continued to have no predictive effect. Welfare Supports have a positive but minor predictive result (Exp B = 1.08, B = .09, Wald = .05). Similarly, the Cox-Snell Likelihood statistic continues to show that organizational characteristics, performance strategies, and management practices explain some but not a lot of variance in the implementation of disability management programs.

The results show that several contextual variables relate to disability management programs. First, I found that union density is the best predictor of both types of disability management programs, and that career growth programs are less likely in manufacturing firms. Aside from these two variables there does not appear to be a clear predictive relationship between organizational characteristics and disability management programs. Second, I found a predictive relationship between organizational excellence performance strategies and DM Programs (Job Accommodations) and negative predictive relationship for external growth strategies. Neither performance strategy predicted DM Programs (Career Growth). Third, I found that both high involvement work practices and welfare supports predict DM Programs (Job Accommodations), but only high involvement work practices predicts DM Programs (Career Growth). Overall, the results show that disability management programs are more likely in organizations that have higher levels of unionization and more high involvement work practices.

*Disability Management Programs and Organizational Performance.* For the second research question (relations between organizational performance and disability management programs), the results show that productivity predicts disability management programs (Table 2.6), and that both disability management programs predict productivity (Tables 2.7 and 2.8). Subsequently, with the present data it is not possible to assign a causal direction to the relationship. Although additional theoretical grounds must be developed to explain this finding, it remains instructive to explore the data in more depth. With the present data and analytical

tools, only the effects of disability management programs on productivity could be further assessed.

It is interesting to note that each of the disability management programs has a different effect on firm productivity. For DM Programs (Job Accommodations) there is a positive relationship with productivity ( $b = .16, p < .01$ ) (Table 2.5), and for DM Programs (Career Growth) there is a negative relationship ( $b = -.11, p < .01$ ) (Table 2.6). However, both variables contribute very marginal increases to the explained variance in productivity, and have coefficients that are smaller in magnitude than the performance strategy variables and similar in magnitude to high involvement work practices. Consequently, these results show that disability management programs do predict productivity but also that relative to other organizational variables the programs have small overall implications to productivity. This is a reasonable result given the indirect role of disability management programs as a support to organizational operations.

In addition to these results, steps in the regression models were added to test for the interaction between disability management programs and both performance strategies and management practices. It is presently unclear if the relationship between management strategy and performance fluctuates with the presence of disability management programs. These tests are an examination of the relations of between strategies and practices in the presence and absence of disability management programs. Other research using the Workplace Employee Survey show that both performance strategies and high involvement work practices are related to organizational performance (Thornhill, White & Raynor, 2005; Zatzick, 2006), and it



may be that disability management programs enhance or disrupt these relationships. These interactions are graphed in Figures 2.2 through 2.7 and discussed below.

The results in both regression models show that productivity is increased when there is greater emphasis for an operating excellence performance strategy ( $b = .29, p < .01$ ), external growth strategy ( $b = .19, p < .01$ ) and / or when there are more high involvement work practices in place ( $b = .16, p < .01$ ). The results also show that disability management programs significantly moderate those relationships. I found that productivity is reduced as organizations with disability management programs increase their emphasis on operating excellence, and that the productivity of organizations without disability management programs exceeds that of organizations with programs when emphasis on operating excellence is high (Figures 2.2 and 2.3). However, it is instructive to note that when there is a low emphasis on operating excellence that the productivity of organizations with disability management programs is greater than organizations without programs. It may be that a higher emphasis on operating excellence results in tighter couplings between job functions and less flexibility in roles. Consequently, it may be that efforts to make job accommodations actually disrupt efficiencies of production, and career growth programs provide developmental opportunities that are helpful to the employee's career but draw valuable resources from organization's operations.

A different interaction effect is observed for organizations emphasizing an external growth strategy (Figures 2.4 and 2.5). In these organizations, disability management programs increase productivity. Although productivity is initially lower for organizations with programs when there is little emphasis on external

growth, as emphasis increases the productivity of organizations with programs exceeds those without programs. The interaction is present for both types of programs but stronger for job accommodation programs. It may be that organizations looking to expand and grow gain significantly from helping employees return to work because these staff have knowledge and abilities that are more difficult to train and develop, or their past experience with the business and business plan means that they are able to perform better than new employees.

Lastly, organizations with more high involvement work practices and a job accommodation program have greater productivity than similar organizations without a job accommodation program (Figure 2.6). High involvement work practices include specific and general training and development, team based roles, regular two-way feedback, flexible scheduling and programs to encourage employee engagement. This finding suggests that in organizations with many of these practices that efforts to bring employees back to work by accommodating their special needs are rewarded with greater productivity. This may be a product of increased employee engagement or commitment to the organization, or a better return on the organization's development investment (rather than having to develop new staff). It may also be that because job rotations and flexible scheduling are more common in these organizations that the uniqueness or negative impact of an employee's job accommodation needs may be significantly decreased as the workplace already regularly adjusts the working environment for staff.

A different result, however, is observed for organizations with more high involvement work practices and a career growth programs (Figure 2.7). In this case,

as the number of practices increases, having a career growth program slightly decreases productivity, and not having a program increases productivity. Career growth programs imply that the incumbent is not fully ready or able to perform their role but is in the position for development purposes. However, high involvement work practice organizations require considerable interaction, connection, and interdependence of staff. In such organizations employees need to be fully prepared and ready to perform their dynamic and integrative roles. Thus, programs that put employees with disabilities in roles where they are still developing skills and competencies for their work may detract from the overall performance capability of the team and thus contribute to reduced productivity.

### **Summary**

In this section I explored answers to the two research questions posed earlier in the chapter. The pattern of results seem to suggest that there are several important relationships between the presence of disability management programs and contextual features of the organization, and between disability management programs and measures of organizational performance. These findings reveal that disability management programs are more common in organizations that have higher levels of unionization and more high involvement work practices. The results also show that the nature of the relationship between disability management programs and firm productivity is not straightforward as they are shown to predict each other. In the next section I discuss these results in more detail by drawing out some of their meaning and presenting some implications of these findings, commenting on

limitations of the present research, and suggesting a few lines of enquiry for additional research.

## DISCUSSION

This chapter began with comments that while there were many recommendations and suggestions about the prevalence, value, and utility of disability management programs in organizations there was actually very little information on these subjects expressed in the literature. To meaningfully fill this information gap it was necessary to assess the level of program implementation in Canadian organizations, determine if there are relationships between contextual features of organizations and the presence of programs, and identify the impact of programs on organizational performance. In this section I examine these results further and sort out some of the meanings and implications of these findings. Then, I take a look at the research methodology undertaken to create these findings and note some of the limitations or restrictions that came into play when working to answer the research questions. Lastly, as the present research presents new information I make a few suggestions on where future research may be profitable and extend the findings further.

*What predicts the presence of disability management programs?* This question asks if the presence of disability management programs corresponds to some contextual features of the organization (e.g., industry, business strategy). In answering this question, I first looked at the prevalence of disability management programs in Canadian organizations. Producing representative statistics on implementation levels supports a more clear view of the status of disability

management programs and organizations. For example, if virtually all organizations have implemented a disability management program then it is reasonable to assume that these programs have some value or utility that is universal in nature. The answers to this question indicate that such universality is not the case, and that the implementation of a program is more likely to be an outcome of a strategic or operational choice. The specific findings are that under half of the sampled organizations with more than twenty employees have implemented one or both forms of disability management program (43%). It is most common for organizations to implement both types of programs, but when only one is implemented it is more likely that it is a job accommodation program than a career growth program. The identified overall implementation rate is similar to the findings of other surveys and reports (Marsh Risk Consulting, 2003). However, it is presented here as a more stable and robust finding because of the methodological and statistical steps taken to map the sample to the broader population of Canadian organizations.

The presence of disability management programs in organizations suggests that these programs provide some value or utility to organizations. Previously it was not clear which organizations were implementing these programs. Learning if there is a logic or pattern to implementation decisions that can be revealed by easily measured characteristics is instructive on several fronts. For example, it supports future research by helping to identify outliers or 'odd cases' in which an organization in a peer group has a different level of implementation than expected. This can lead to better theoretical or conceptual development in understanding which organizations find value in implementing disability management programs. Alternatively,

advocacy efforts or legislative / public policy incentives can be more appropriately focused on organization groupings that tend to not implement disability management programs.

Three groups of variables were examined for predictive relations with disability management programs: organizational characteristics, business strategies, and management programs. The findings indicate that there are some features of organizations that do relate to the presence of disability management programs, and that these features are similar for both job accommodation and career growth programs. Of the structural characteristics, I found that union density has a positive relationship with both disability management programs, and that manufacturing firms were less likely to have career growth programs. The predictive relation of union density and disability management programs is consistent with the role of unions as protectors of employee rights and advocates for better working conditions. The non-predictive relation of industry to job accommodation programs is counter-intuitive as it is reasonable to expect that either the higher occupational health and safety demands of a manufacturing plant, or the greater link of employees to revenue generation in service firms would prompt the implementation of a disability management program.

For the business strategies, I found that the operating excellence strategy positively predicts job accommodation programs and the external growth strategy negatively predicts these programs. Neither strategy predicted a career growth program. The relation of the operating excellence strategy with job accommodations reflects the strategies' premise of continual improvement with existing resources and

maximization of those resources. It is surprising that there is a negative relationship between an external growth strategy and job accommodation programs. It is difficult to understand this relationship, but one possibility is that in organizations with a high external growth strategy the work environment and job tasks are less standardized and less sequential. Growth requires change and flexibility, not incremental improvements. Consequently, it may be that organizations focusing on business growth are less inclined to implement programs that tend to establish parameters and restrictions on jobs (i.e., make the job fit the needs of the employee, not vice versa). Lastly, I found that both high involvement work practices and welfare supports positively predict both disability management programs. The relation of high involvement work practices with these programs is in line with the practices' general recognition of individuals as part of the team, and with the progressive nature of these practices. The relation of welfare supports is consistent with interests of organizations in helping to support the financial security and well-being of its employees.

The findings on this research question provide valuable insight into disability management programs in organizations. In their details they provide new information about the profiles of organizations and when disability management programs are more likely to be present, and when they are not. However, a high level look of the results also reveals an important general point about disability management in organizations: disability management is more a product of management thought than contextual constraint. Only one structural characteristic had predictive abilities for both disability management programs, and the role of

unions in this regard can be seen as a matter of influence on management practices. Thus, while disability management programs may be a good idea there does not appear to be factors in organizations' operating environments that make them compelling to implement. In contrast, the systems and practices of management – how the organization set out to achieve its business goals, does substantively predict the presence of disability management programs. This is a positive finding for groups advocating greater implementation of disability management programs. It moves the issue away from functional and operational concerns into issues of management attitudes and methods. This means that advocates can focus promotional efforts more on aligning disability management programs with strategic visions and less on issues of administrative resources and operational barriers.

The findings also illustrate the importance of collecting and analyzing data for the Canadian national context. The most clear predictors of disability management programs are higher unionization and more high involvement work practices and welfare supports. These variables have been shown to differ across national borders. The level of unionization in Canada is almost double that in the United States of America (approximately 30% versus 15%) (Statistics Canada, 2004) and thus may explain the higher rate of program implementation than previously identified in the literature. With respect to management practices (high involvement work practices and management supports), Pil and MacDuffie (1996) conclude that some countries are faster at adopting innovative or non-traditional programs. In this case, Canada is slower adopter of practices than several European countries in part because of its general inflexibility to non-crisis induced change. The descriptive



statistics part of the findings revealed that relatively few high involvement work practices are in place in Canadian organizations, and that only 43% of firms have a disability management program. Westmorland and Buys (2004) suggest that in comparison to Australia, Canada has a more economical and less social security undertone to its disability management programs. Consequently, appreciating the apparent reluctance of Canadian firms to amend management programs without economic imperative may aid our understanding of program implementation rates in a Canadian economic environment that has been relatively stable and comfortable for most firms. This finding also bolsters the suggestion that early adopters of disability management programs may have a competitive advantage on organizations when labour markets are tight.

*What is the relationship between disability management programs and organizational performance?* The role of disability management programs in saving organizations absence-related costs is well documented (Dyck, 2006; Harder and Scott, 2005). This second research question asks if disability management programs make contributions to firm-level outcomes that enable the organization be more competitive in the marketplace. Correlation does not imply causation, and the causal direction could go either way. However, I assume a causal order from disability management programs to productivity based on the prior work of Guthrie (2001), Huselid (1995) and Zatzick & Iverson (2006). From this further exploration of the data, I found that each disability management program had a different effect on firm productivity. Job accommodation programs had a positive relationship with

productivity, and career growth programs had a negative relationship with productivity.

The productivity measure has two parts: revenue per employee, and salary costs per employee. To better understand the effects of disability management programs on productivity and explain these results additional tests were performed to examine each program's impact on revenue and salary costs. These results are presented in Tables 2.9 and 2.10. Job accommodation programs are found to positively predict revenue per employee but career growth programs are found to negatively predict revenue per employee. This is similar to the overall productivity finding. However, the results for labour costs per employee show that both job accommodations and career growth programs predict increases in these costs. These results indicate that the disability management programs impact productivity differently. Job accommodation programs are related to increased revenues but the associated additional labour costs are not large enough to counteract those increases resulting in a net gain in productivity. In contrast, career growth programs decrease revenues and there are associated additional labour costs, resulting in a net loss to productivity. These results reveal that although disability management programs may be seen to have similar overall goal intentions, the financial impacts of each program are quite different.

The interaction of disability management programs with the other predictor variables produced some interesting findings. First, the negative interaction of the operating excellence strategy with both disability management programs was not expected. Earlier results showed that job accommodation programs were more likely

in organizations with a greater emphasis on maximizing the effectiveness of business operations. The underlying assumption is that disability management programs are a mechanism for achieving this effectiveness because these programs retained staff with firm-specific knowledge and experience. However, while the strategy and program are individually associated with increased productivity, in combination they decrease productivity. An explanation of this result is that organizations with more emphasis on internal operations may create more tightly coupled processes and job functions in order to create efficiencies. Consequently, job accommodation requirements in this type of work environment may create flexibility demands that ultimately result in process inefficiencies and thus reduced productivity. If this is correct, the positive relationship between the business strategy and job accommodation programs found earlier may be more a function of the optimizing efforts (and openness to change) of the strategy rather than the knowledge and experience retention abilities of the program.

Second, the positive interaction of external growth strategies with both disability management programs shows that an organization's emphasis does not need to be on cost savings in order to gain positive results from these programs. This result is also informing when considered with the finding that an external growth strategy negatively relates to job accommodation programs. What this means is that organizations looking to grow their business through expansion and development may be missing a significant opportunity to increase their organizational performance through disability management programs.

Lastly, the positive interaction of job accommodation programs with high involvement work practices is expected. It makes sense that efforts to reintegrate and return employees to the workplace has greater impacts on productivity when there are more practices that emphasize team work and capitalize on unique contributions of team members. The negative interaction effect of career growth programs with high involvement work practices is surprising. However, it may be that while job accommodations enable the employee to more effectively contribute to the team, career growth programs may reduce the effectiveness of the team as more group time is spent unproductively (in a revenue generation context) helping the employee develop their capacities and learn their role.

*Summary.* The literature does not make noticeable operational distinctions between types of disability management programs. My research results show that there are similarities and differences between job accommodation and career growth disability management programs. Through my investigation of factors that predict the presence of programs union density, high involvement work practices, and welfare supports are found to predict both types of programs. Job accommodation programs are also shown to have a positive relationship with operating excellence performance strategies and a negative relationship with external growth performance strategies. From these findings it is possible to create a preliminary profile of organizations that are, or are not, likely to have a disability management program in place. My research also shows that each type of disability management program has different impacts on productivity per employee. I find that job accommodation programs positively relate to productivity, and career growth programs negative

relate to productivity. The central point is that both these programs increase labour costs, however only job accommodation programs increase revenues sufficiently to cover these increases costs. Together, these results significantly increase knowledge and understanding of disability management programs in organizations.

### **Limitations**

The above research makes clear contributions to the literature. However, there are limitations in my investigation of the research questions that must be noted. First, secondary data is relied upon to address the research questions. While the data is provided by Statistics Canada and has a high degree of statistical validity and rigor, there are still several significant limitations of the data. One issue is that the use of an employee-derived measure for the presence of disability management programs is somewhat problematic. While integrating employee responses from the Employee Survey helps address potential issues of common method bias, and provides the only measures of disability management programs in the entire WES series, the measures may not accurately reflect disability management programs in organizations. In aggregating the employee responses, the presence of a disability management program was affirmed if at least one employee identified that it was there. This may lead to a false-negative report, where an organization does in fact have a disability management program but the sampled employees were not aware of it. There were only a few cases where all sampled employees in the organization confirmed that a disability management program existed, and in many cases less than half of the employees confirmed its presence. This suggests that employee reports are helpful in identifying the presence of a program, but because of internal

inconsistency the reports may be more limited in determining that an organization does not have program.

A second issue is that the disability management program measures do not reflect the full nature of the disability management program. That is, they do not indicate whether the program has a good reputation in the organization or provides tangible and practical value. This lack of information makes it difficult to understand why organizations may or may not choose to implement a disability management program, or how the program practically contributes value to the organization.

Third, only two forms of disability management programs are assessed in the survey. While accommodation and career growth programs are clearly within the normal offering of disability management programs, there are many other forms and attributes that deserve consideration. For example, many disability management texts call for some form of 'work hardening' or 'gradual return to work' where the employee is incrementally reintroduced the workplace and their work. These programs are not reflected in the data, and may have equal or unequal relations to the examined variables.

Fourth, both dependent variables are measured with single items. Generally, it is preferable to use multi-items, particularly for dependent variables in order to enhance the reliability and validity of the measures (Jobson, 1991). However, in some cases, such as job satisfaction, single items measures can be as reliable as multi-item measures (Wanous, Reichers & Hudy, 1997). With the present data it is not possible to compare the respective validity and reliability values of single and

multi-item measures of disability management programs. But, as single item measures likely have lower reliability and thus making it more difficult to find correlation effects, it may be that my findings are understating the true relations of variables with disability management programs.

Fifth, my research designed examined relations between disability management programs and productivity with a cross-sectional perspective. The examination of competing alternatives for explaining program – productivity relations confirmed that this design was insufficient to determine a causal direction. Longitudinal research will help to address this concern. However, such research must take place with data collected outside of the WES product as the disability management variables within the WES are not consistent across cycles, and are omitted altogether in the most recent cycles.

Lastly, inferences of relations between the variables reflect my own personal biases and understandings of disability issues. However, most important is the intentions for relations between the variables by organizational decision makers. As information about these intentions is not available from the data set, interpretations of the results may or may not accurately reflect the decision making process in organizations about disability management programs.

While these limitations provide reasons to carefully examine the findings and appreciate the restrictions under which the results are produced, they do not negate the relevance of the findings. Rather, they reinforce the importance of recognizing that the results reflect one of many perspectives and sources of information about disability management programs in organizations. In the next section, I discuss a

few lines of enquiry that can help to clarify the findings presented here and extend the research further.

### **Future Research**

In this chapter I have opened a discussion of disability management in an organizational context. And, throughout my research I have pointed to areas where there are assumptions to be tested and measures to be improved. These are all opportunities for future research.

However, there is much more terrain at the broader level of disability management and organization to be worked out. For example, in my research I have primarily examined these issues from the perspective of the organization as an autonomous decision maker. Organizations operate in a broader social, economic, and political environment and it is relevant to examine the impact of that environment on organizations and disability management decisions. 'External environment' refers to the structures and forces outside of the organization that shape the competitive playing field (Andrews, 1971). This includes general forces (e.g., socio-cultural trends), direct forces (e.g., interest rates), technology (e.g., personal computers), and competitors (Daft, 2006). Numerous authors have proposed linkages between the external environment and organizational strategy, structure, and systems (e.g., Blau, 1956; Burns & Stalker, 1961; Michie & Sheehan, 2005; Weiner & Mahoney, 1981) and it is reasonable to expect that organizations and managers respond to the particular dynamics or changes in the larger environment. Therefore, in the following discussion of future research opportunities I focus on three aspects of the organization's external environment that have implications for how the



organization manages disability issues. These are joint labour-management collaboration, industry interconnectedness, and legislation and public policy. Each is now discussed.

*Joint Union-Management Collaboration.* My findings show that one of the strongest predictors of disability management programs in an organization is the level of union density in the organization. Consequently, it is reasonable to say that unions influence organizations to implement disability management programs, particularly given their legal responsibility to help ill or injured employees return to work (Armstrong & Greckol, 1999). The initial premise of union involvement in disability issues was to ensure that the benefits of employment were enjoyed by all workers, including those with disabilities (Mills, 1995). Exchanges between union and organizations center on rights issues with two clear sides. On the one hand, employers looked to maximize productivity by keeping disabled employees out of the organization and unions looked to reinsert employees into the workforce for the dual benefits of the employees' overall well-being and the unions' revived revenue stream from worker dues (Shrey, 1995). This contrast of rights and interests between the participants in disability management led to significant litigation and entrenchment on all sides of the issue (Lee, 1992).

However, the traditional grounds of union influence with respect to terms and working conditions of members, and by extension a constriction of management control, is waning (Levine, 1995). In recent times some unions have shifted out of collective bargaining roles and taken forward agendas to influence workplace management practices (i.e. work team design, inclusionary practices, and team-

oriented pay plans) (Bognanno & Kleiner, 1992; Deshpande & Gohlar, 1995; Lawler III & Mohrman, 1987). Consequently, Cutcher-Gershenfeld and Kochan (2004) comment that it is no longer sufficient to examine the influence of unions on organizations and their systems strictly on the basis of union presence and mandate fulfillment. Rather, the nature of the relationship between the union and management should be considered in parallel to the presence of the relationship.

This advice is pertinent as the practice of disability management is evolving to include best-practice recommendations for joint union-management committees to collaboratively address complex and sensitive issues (see Dyck, 2006; National Institute of Disability Management and Research, 2003; Harder & Scott, 2005). For example, there is considerable debate along moral and legal lines about the precedence of collective agreements over legislation in terms of 'light duty work' given to persons returning from injury or illness as a job accommodation and employees with seniority and thus 'rights' to the work (Lee, 1992; Mills, 1995). The important factor in the efficacy of disability management programs may hinge on the quality of relations and collaborations between management and unions and their ability to collectively find win – win solutions to complex management issues. However, currently, the literature points solely to the need for collaborative union-management problem solving on disability management issues. Research is required to illuminate the grounds upon which compromises and solutions are reached, and the impact of these collaborations on employee return to work outcomes. Said directly, collaborative approaches seem reasonable and are intuitively the right thing

to do, but evidence to show that they have beneficial impact on the effectiveness of employee reintegration to the workplace has yet to be produced.

*Industry Interconnectedness.* The interconnectedness of competitors in the industry has significant potential to influence the policies and procedures in respective organizations (Oliver, 1991). That is, the systems of many organizations reflect their perception of how other organizations are dealing with management issues rather than responding to the specific demands of their own work activities. This is because looking and acting similar to other organizations increases the legitimacy of the organization (Hambrick, Finkelstein, Cho & Jackson, 2004; DiMaggio & Powell, 1983) and provides guidance as to 'what to do' when the organization is not sure which path is best (Hrebiniak & Snow, 1980).

Further, research from Walter, Lechner & Kellermanns (2007) shows that industry information sharing is an important factor in explaining the adoption of management policies and procedures. Westphal, Gulati & Shortell (1996; 1997) show that administrative innovations (e.g., new or changed management programs) in organizations are directly linked to the network ties of the organization. Although there are a number of real and potential catalysts (such as legitimacy seeking and operational success), the key outcome is a diffusion of program innovations through the network as each organization observes and learns from other members. In a systematic review of management policies and practices adoption literature, Leseure, Bauer, Birdi, Neely & Denyer (2004) similarly found that inter-organizational relationships had a significant 'institutional push' effect upon an organization's implement of new or promising management practices.

While some forces in industrial capitalism tended to exclude employees with disabilities from the workplace (Oliver, 1990), new management trends and labour market issues are initiating a revisiting of standard approaches. For example, shortages in the labour market are forcing organizations to re-examine the availability of staff from non-traditional labour pools such as persons with disabilities. Additionally, management practices that place a premium on employee engagement and involvement in their work, such as high involvement work practices, are becoming more common in many organizations. Subsequently, it follows that organizations at the leading edge of changing attitudes towards persons with disabilities may positively influence other organizations in their peer group, particularly if they are demonstrating productivity gains from their disability management programs. Although little academic research has focused directly on industry interconnections and disability management, the National Institute for Disability Management (2003) gives further evidence and suasion to support the mutually reinforcing nature of organizations upon each other's disability management policies and procedures.

In light of the above, it seems reasonable that connections between organizations may be an important contextual feature of the external environment for the implementation of a disability management in a given organization. Research that illustrates the diffusion of disability management programs across industry groups will help to explain part of the reason why organizations choose to implement a disability management program.

*Legislation and Public Policy.* Legislation and federal/provincial public policies send administrative messages to organizations (Milne & Blum, 1998). Generally, they set the floors and walls of appropriate conduct (enforced by punitive actions) and provide direction as to minimum societal expectations. The effects of legislation and public policy on organizational policies and procedures and the behaviour of managers is most readily attributed to their coercive nature (Dobbin, Sutton, Meyer, & Scott, 1993). That is, organizational members (e.g., lawyers, executives) pick up these signals and integrate the legislation and policy into their organizations to achieve an acceptable degree of alignment and compliance (Milne & Blum, 1998).

The government rarely mandates specific organizational responses to disability issues, however the introduction of laws to protect the persons with disabilities from unfair discrimination has changed how organizations manage its human resources in this regard (Lee, 1996; Williams, 2004). For example, the *Employment Equity Act* (applicable to federal agencies and contractors) ensures that persons with disabilities have equal access to jobs and are fairly represented in the workplace. The organizational response to legislative requirements like these is typically an increase in the complexity and defensibility of selection and performance measurement efforts (Lee, 1996; Stone & Williams, 1997). In fact, the effect of legislation and public policy on many aspects of disability management seems to be the formalization of processes and procedures in order to show evidence of compliance (Florey & Harrison, 2000; Rönmmar, 2004; West & Cardy, 1997).

Interestingly, the effects of legislation and public policy may operate through channels that are additional to the simple proclamation of legislation, such as through arbitration hearings.

While legislation does not provide specific direction for organizational responses, judicial interpretation of the rules does. Arbitration of disability issues has resulted in clarification of case law for the management of persons with disabilities. In fact, arbitration has become the leading quasi-judicial forum for addressing disability issues, and the outcomes of arbitration have significant implications for employers in managing disabilities (Lynk, 2006). For example, arbitration cases have given direction to management concerns such as how many relapses are too many, when are safety concerns sufficient to support dismissal for disability, and what constitutes undue hardship (*Central Alberta Dairy Pool v. Alberta Human Rights Commission*, 1990; *Edmonton (City) v. Amalgamated Transit Union*, 2003; *Health Employers Association of British Columbia v. British Columbia Nurses' Union*, 2006; *Shuswap Lake General Hospital v. British Columbia Nurses' Union [Lockie Grievance]*, 2002;). As such, the 'rules of the game' and expected organizational responses become much clearer when tested and adjudicated upon. Consequently, legislation and public policy have fairly clear, if understated, influence for the formalization and codification of an organization's disability management policies and procedures.

While legislation (generally) applies equally to all organizations, perhaps the more appropriate variable for legislation is the degree to which organizations and managers recognize its presence or understand its implications (Jackson, 2000). I anticipate that when organizations and managers have a good awareness of the disability legislation and public policy (e.g., through legal advisors and / or arbitration experience), they will implement policies and procedures that emphasize their ability to meet the associated provisions. Thus, research that traces the route between the proclamation of legislation and public policy through to the implementation of disability management programs will illuminate the management decisions that are made for addressing disability issues in the organization.

### **Conclusion**

This chapter identifies and addresses several informational gaps in the literature of disability management programs in organizations. I begin the chapter by outlining two research questions that ask about the organizational contexts in which disability management programs are commonly implemented, and the relations between these program and organizational performance. Answers to these questions are produced with secondary data from Statistics Canada. The first key finding is that of the examined contextual features union density, high involvement work practices, and welfare practices are most clearly and strongly related to the presence of disability management programs. The second key finding is that disability management programs are related to firm productivity. Although additional research and theoretical development is required to more fully answer the research questions

posed, this chapter makes a contribution to the disability management literature as it helps clarify the characteristics of organizations that have disability management programs and the productive value of these programs to organizations.



**TABLE 2.1**  
**Firm Strategy Factor Scores**

Variable	Operating Excellence	External Growth	Labour Costs
Strategy: undertaking R&D	.020	<b>.829</b>	.058
Strategy: reorganizing the work process	<b>.532</b>	.163	.319
Strategy: enhance labour-management cooperation	<b>.604</b>	.210	.238
Strategy: increase employee's skills	<b>.805</b>	.074	.071
Strategy: increase employee involvement	<b>.788</b>	.137	.102
Strategy: improve coordination with customer/supplier	<b>.728</b>	.128	.063
Strategy: improve measures of performance	<b>.781</b>	.142	.184
Strategy: develop new products/services	.126	<b>.852</b>	.088
Strategy: develop new production/operating techniques	.182	<b>.795</b>	.143
Strategy: expanding in new geographic markets	.278	<b>.573</b>	.069
Strategy: total quality management	.357	<b>.515</b>	.191
Strategy: improve product/service quality	<b>.600</b>	.270	.137
Strategy: reduce labour costs	.362	.130	<b>.669</b>
Strategy: use more part-time, temporary or contract	.050	.080	<b>.775</b>
Strategy: reduce other operating costs	.356	.008	<b>.641</b>

$n = 1,386$ ,  $N = 78,263$ . Weights provided by Statistics Canada were used to ensure that the sample population represented the general Canadian population

**TABLE 2.2**  
**Welfare Supports Factor Scores**

<b>Variable</b>	<b>Welfare Supports</b>
Severance Allowance	<b>.567</b>
Employment Insurance Top Up	<b>.600</b>
Health Care Insurance	<b>.767</b>
Life Insurance	<b>.816</b>
Pension Plan	<b>.714</b>

*n* = 1,386, *N* = 78,263. Weights provided by Statistics Canada were used to ensure that the sample population represented the general Canadian population

**TABLE 2.3**  
**Management Programs and Practices Factor Scores**

<b>Variable</b>	<b>Welfare Supports</b>	<b>DM Programs</b>	<b>High Involvement</b>
DM Programs (Job Accommodations)	-.173	<b>.951</b>	.026
DM Programs (Career Growth)	-.161	<b>.955</b>	.037
Gains Sharing Program	-.000	<b>.031</b>	<b>.820</b>
Training Program	-.040	-.105	<b>.623</b>
Flexible Job Design	.026	.091	<b>.802</b>
Information Sharing with Employees	.022	.113	<b>.445</b>
Problem Solving Team	.018	-.134	<b>.545</b>
Self Directed Work Groups	.061	-.008	<b>.401</b>
Severance Allowance	<b>.567</b>	-.051	.038
Employment Insurance Top Up	<b>.600</b>	.080	.141
Health Care Insurance	<b>.767</b>	-.136	-.038
Life Insurance	<b>.816</b>	-.102	-.084
Pension Plan	<b>.714</b>	-.078	-.121

*n* = 1,386, *N* = 78,263. Weights provided by Statistics Canada were used to ensure that the sample population represented the general Canadian population

**TABLE 2.4**  
**Frequency of Disability Management Programs in Organizations**

		<b>DM Programs ( Job Accommodations)</b>	
		<b>No</b>	<b>Yes</b>
<b>DM Programs (Career Growth)</b>	<b>No</b>	44,610	6,249
	<b>Yes</b>	2,598	27,806

*n* = 1,386, *N* = 78,263. Weights provided by Statistics Canada were used to ensure that the sample population represented the general Canadian population

**TABLE 2.5**  
**Descriptive Statistics and Correlations**

Variable	Mean	SD	1	2	3	4
1 DM Programs (Job Accommodations)	.43	.18				
2 DM Programs (Career Growth)	.39	.11	.41**			
3 Productivity Per Employee <sup>a</sup>	337	108	.12**	.17**		
4 Operating Excellence Strategy	3.21	.82	.06**	-.09**	.03**	
5 External Growth Strategy	3.17	.82	-.17**	.08**	.06**	.32**
6 High Involvement Work Practices	1.56	1.48	.39**	.21**	.03**	.10**
7 Welfare Supports	3.87	1.04	.18**	.04**	.04**	.13**
8 Workplace Size	66.03	197.93	.07**	.05**	.06**	.13**
9 Union Density	.12	.29	-.08**	-.04**	.14**	.13**
10 Industry	.67	.43	.13**	-.03**	-.11**	.01**
11 Workplace Age	16.35	19.03	-.22**	-.21**	.08**	.16**

Variable	5	6	7	8	9	10
5 External Growth Strategy						
6 High Involvement Work Practices	-.23**					
7 Welfare Supports	-.11*	.08**				
8 Workplace Size	.15**	.09**	.13**			
9 Union Density	-.00	-.01**	.22**	.22**		
10 Industry	.14**	-.00	-.16**	-.13**	.06**	
11 Workplace Age	.21**	-.09**	.03**	.06**	.31**	-.06**

<sup>a</sup> Thousands (000's)

$n = 1,386$ ,  $N = 78,263$ . Weights provided by Statistics Canada were used to ensure that the sample population represented the general Canadian population

\*  $p < .05$  (2-tailed).

\*\*  $p < .01$  (2-tailed).

**TABLE 2.6**  
**Results of Logistical Regression Analyses For Disability Management Programs**

Variables	DM Programs (Job Accommodations)			
	B	Wald	-2 Log Likelihood	Exp (B)
Model 1: Organizational Characteristics	Cox – Snell Likelihood: .09			
Workplace Size	.01	.09	19.23	1.01
Union Density	.41	.01	55.37	1.53
Industry	.13	.06	17.98	1.02
Workplace Age	-.02	.06	435.21	.98
Model 2: Performance Strategy	Cox – Snell Likelihood: .05			
Operating Excellence Strategy	.92	.02	944.55	2.51
External Growth Strategy	-.55	.02	1040.84	.58
Model 3: Management Practices	Cox – Snell Likelihood: .03			
High Involvement Work Practices	.87	.01	600.51	2.39
Model 4: Non Wage Benefits	Cox – Snell Likelihood: .04			
Welfare Supports	.53	.02	329.57	1.44
Model 5: Productivity	Cox – Snell Likelihood: .02			
Productivity Per Employee <sup>a</sup>	.44	.03	474.81	1.84

Variables	DM Programs (Career Growth)			
	B	Wald	-2 Log Likelihood	Exp (B)
Model 1: Organizational Characteristics	Cox – Snell Likelihood: .12			
Workplace Size	-.01	.11	48.51	.99
Union Density	.62	.05	100.32	1.85
Industry	-.37	.03	209.78	.69
Workplace Age	-.02	.06	642.14	.98
Model 2: Performance Strategy	Cox – Snell Likelihood: .02			
Operating Excellence Strategy	.01	.02	313.20	1.00
External Growth Strategy	-.01	.02	517.15	.99
Model 3: Management Practices	Cox – Snell Likelihood: .03			
High Involvement Work Practices	.25	.01	837.64	1.29
Model 4: Non Wage Benefits	Cox – Snell Likelihood: .04			
Welfare Supports	.03	.05	187.38	1.02
Model 5: Productivity	Cox – Snell Likelihood: .02			
Productivity Per Employee <sup>a</sup>	.09	.05	266.23	1.08

<sup>a</sup> Thousands (000's)

*n* = 1,386, *N* = 78,263. Weights provided by Statistics Canada were used to ensure that the sample population represented the general Canadian population

\* *p* < .05 (2-tailed).

\*\* *p* < .01 (2-tailed).

**TABLE 2.7**  
**Regressing DM Programs (Job Accommodations) on Productivity**  
**Per Employee**

Variables	1	2	3	4	5	6
Organizational Characteristics						
Workplace Size	.13**	.13**	.13**	.14*	.14**	.14**
Union Density	.05*	.05*	.05*	.05*	.03*	.03*
Industry	-.27**	-.26**	-.22**	-.22**	-.21**	-.21**
Workplace Age	.02**	.02**	.02**	.01**	.01**	.01**
Independent Variables						
Operating Excellence Strategy (OES)	-	.33**	.29**	.29**	.29**	.33**
External Growth Strategy (EGS)	-	.21**	.22**	.19**	.19**	.23**
Management Practices						
High Involvement	-	.15**	.15**	.16**	.16**	.16**
Work Practices						
DM Programs						
DM Programs (Job Accommodations)	-		.16**	.18**	.18**	.17**
Two Way Interactions						
HIWP * OES				-.03**		-.03**
HIWP* EGS				.32**		.32**
DM Programs (JA) * OES	-		-	-	-.17**	-.17**
DM Programs (JA) * EGS	-		-	-	.23**	.23**
DM Programs (JA) * HIWP	-		-	-	.26**	.26**
R2	.11	.20	.21	.22	.22	.22
Change R2	.10	.09	.01	.01	.00	.00

$n = 1,386$ ,  $N = 78,263$ . Weights provided by Statistics Canada were used to ensure that the sample population represented the general Canadian population

\*  $p < .05$  (2-tailed).

\*\*  $p < .01$  (2-tailed).



**TABLE 2.8**  
**Regressing DM Programs (Career Growth) on Productivity Per Employee**

Variables	1	2	3	4	5	6
Organizational Characteristics						
Workplace Size	.13**	.13**	.13**	.14*	.14**	.14**
Union Density	.05*	.05*	.05*	.05*	.03*	.03*
Industry	-.27**	-.26**	-.22**	-.22**	-.21**	-.21**
Workplace Age	.02**	.02**	.02**	.01**	.01**	.01**
Independent Variables						
Operating Excellence Strategy	-	.33**	.33**	.29**	.29**	.33**
External Growth Strategy	-	.21**	.21**	.19**	.19**	.23**
Management Practices						
High Involvement Work Practices	-	.15**	.15**	.16**	.16**	.15**
DM Programs						
DM Programs (Career Growth)	-		-.11**	-.13**	-.11**	-.11**
Two Way Interactions						
HIWP * OES				-.03**		-.03**
HIWP* EGS				.32**		.32**
DM Programs (CG) * OES					-.32**	-.32**
DM Programs (CG) * EGS	-		-	-	.19**	.19**
DM Programs (CG) * HIWP	-		-	-	-.11**	-.11**
R2	.11	.20	.20	.22	.22	.22
Change R2	.11	.09	.00	.02	.00	.00

$n = 1,386$ ,  $N = 78,263$ . Weights provided by Statistics Canada were used to ensure that the sample population represented the general Canadian population

\*  $p < .05$  (2-tailed).

\*\*  $p < .01$  (2-tailed).

**TABLE 2.9**  
**Regressing DM Programs on Revenue Per Employee <sup>a</sup>**

Variables	1	2	3	4
<b>Control Variables</b>				
Workplace Size	.19**	.13**	.12*	.14**
Union Density	.05*	.05*	.05*	.05*
Industry	-.29**	-.25**	-.25**	-.25**
Workplace Age	.03**	.01**	.01**	-.06**
<b>Independent Variables</b>				
Operating Excellence Strategy	-	.15**	.15**	.12**
External Growth Strategy	-	.35**	.36**	.38**
<b>Management</b>				
High Involvement Work Practices	-	-	.13**	.18**
<b>DM Programs</b>				
DM Programs (Job Accommodations)	-	-	-	.18**
DM Programs (Career Growth)	-	-	-	-.25**
R2	.10	.21	.22	.22
Change R2	.10	.11	.01	.00

<sup>a</sup> Natural Logarithm

$n = 1,386$ ,  $N = 78,263$ . Weights provided by Statistics Canada were used to ensure that the sample population represented the general Canadian population

\*  $p < .05$  (2-tailed).

\*\*  $p < .01$  (2-tailed).

**TABLE 2.10**  
**Regressing DM Programs on Labour Costs Per Employee <sup>a</sup>**

Variables	1	2	3	4
Control Variables				
Workplace Size	.13**	.11**	.11*	.11**
Union Density	.15*	.16*	.15*	.15*
Industry	-.24**	-.21**	-.21**	-.20**
Workplace Age	.18**	.17**	.13**	.13**
Independent Variables				
Operating Excellence Strategy	-	-.26**	-.28**	-.27**
External Growth Strategy	-	.31**	.37**	.38**
Management				
High Involvement Work Practices	-	-	.15**	.13**
DM Programs				
DM Programs (Job Accommodations)	-	-	-	.13**
DM Programs (Career Growth)	-	-	-	.24**
R2	.05	.11	.15	.16
Change R2	.05	.06	.04	.01

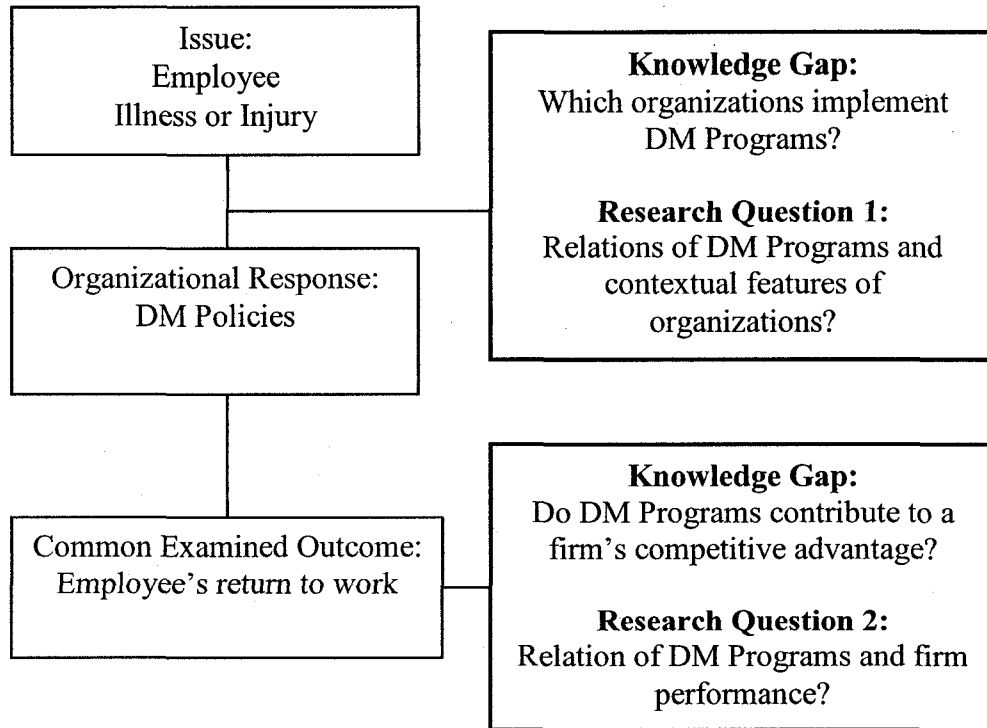
<sup>a</sup> Natural Logarithm

$n = 1,386$ ,  $N = 78,263$ . Weights provided by Statistics Canada were used to ensure that the sample population represented the general Canadian population

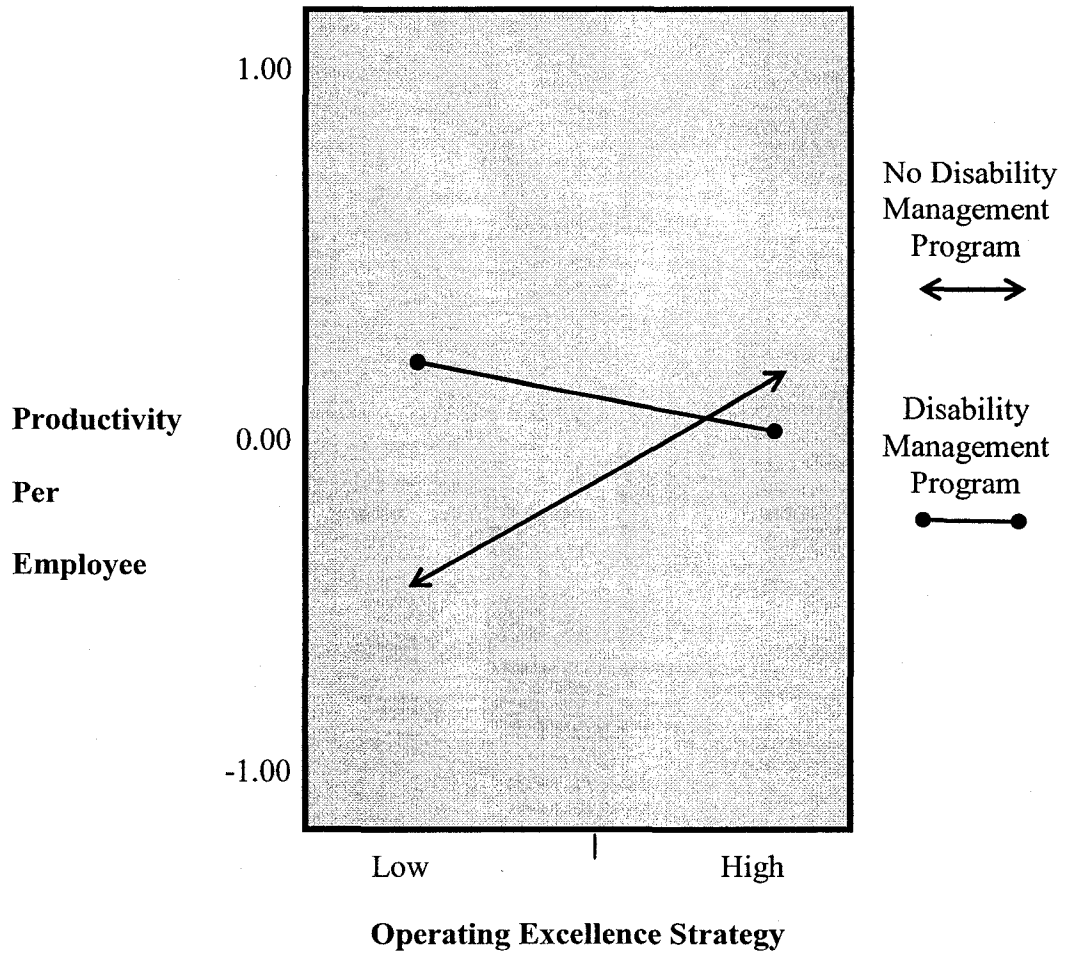
\*  $p < .05$  (2-tailed).

\*\*  $p < .01$  (2-tailed).

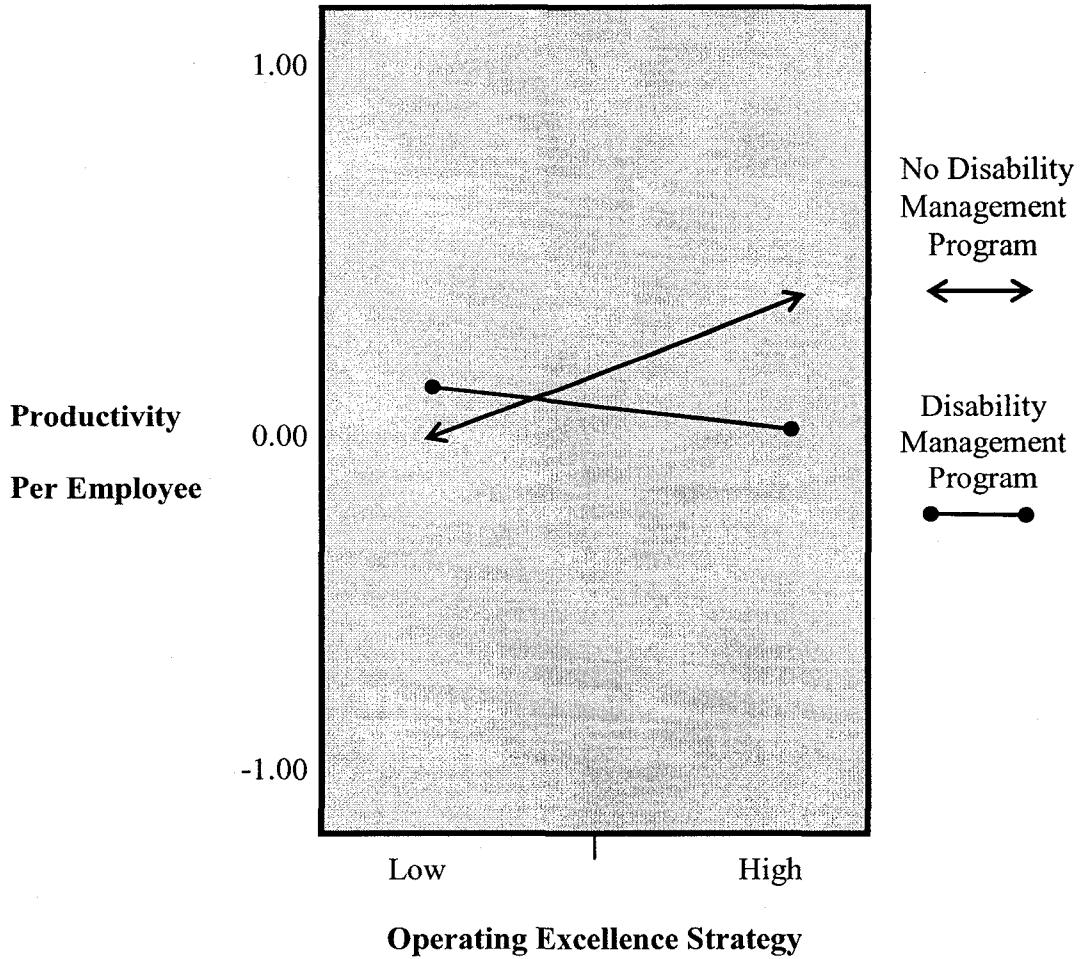
**FIGURE 2.1**  
**Research Questions Examined in Chapter 2**



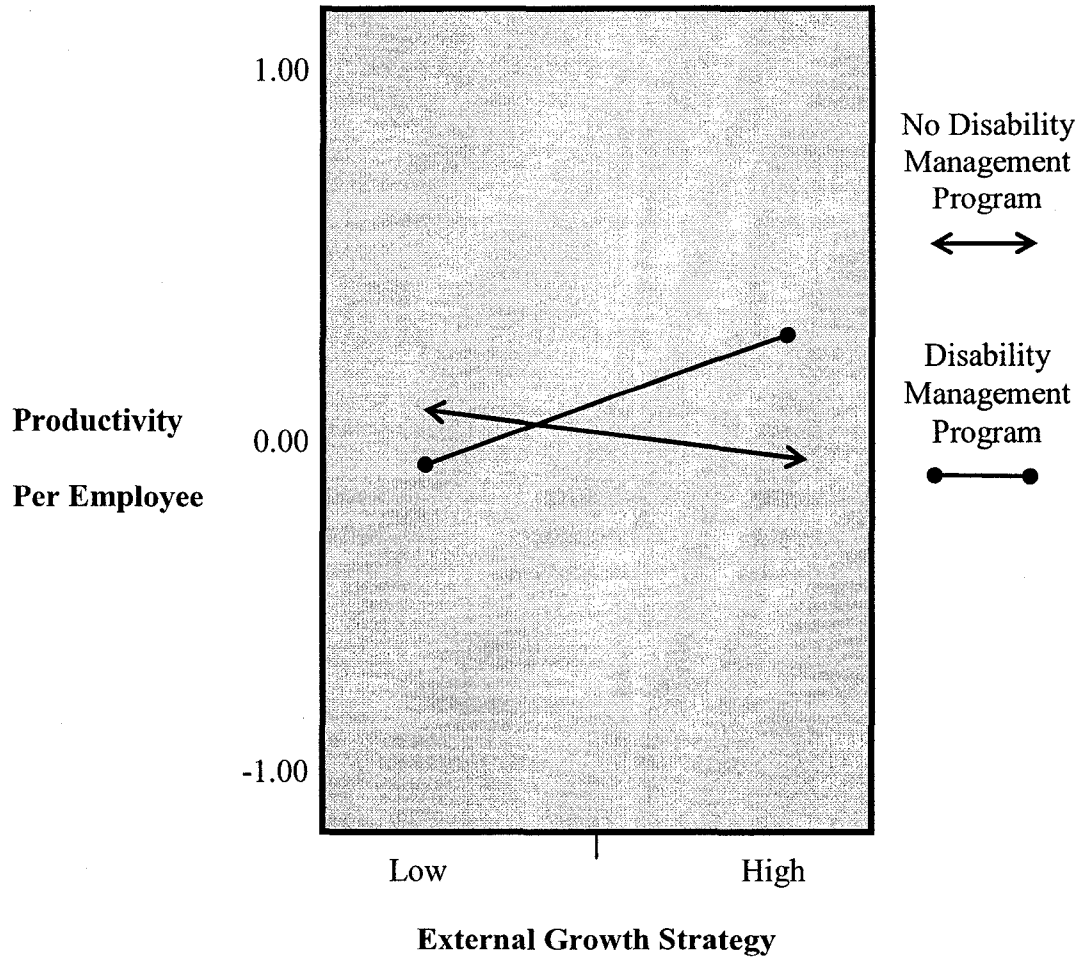
**FIGURE 2.2**  
**Interaction Effects of DM Programs (Job Accommodations) and Operating Excellence Strategy on Productivity Per Employee**



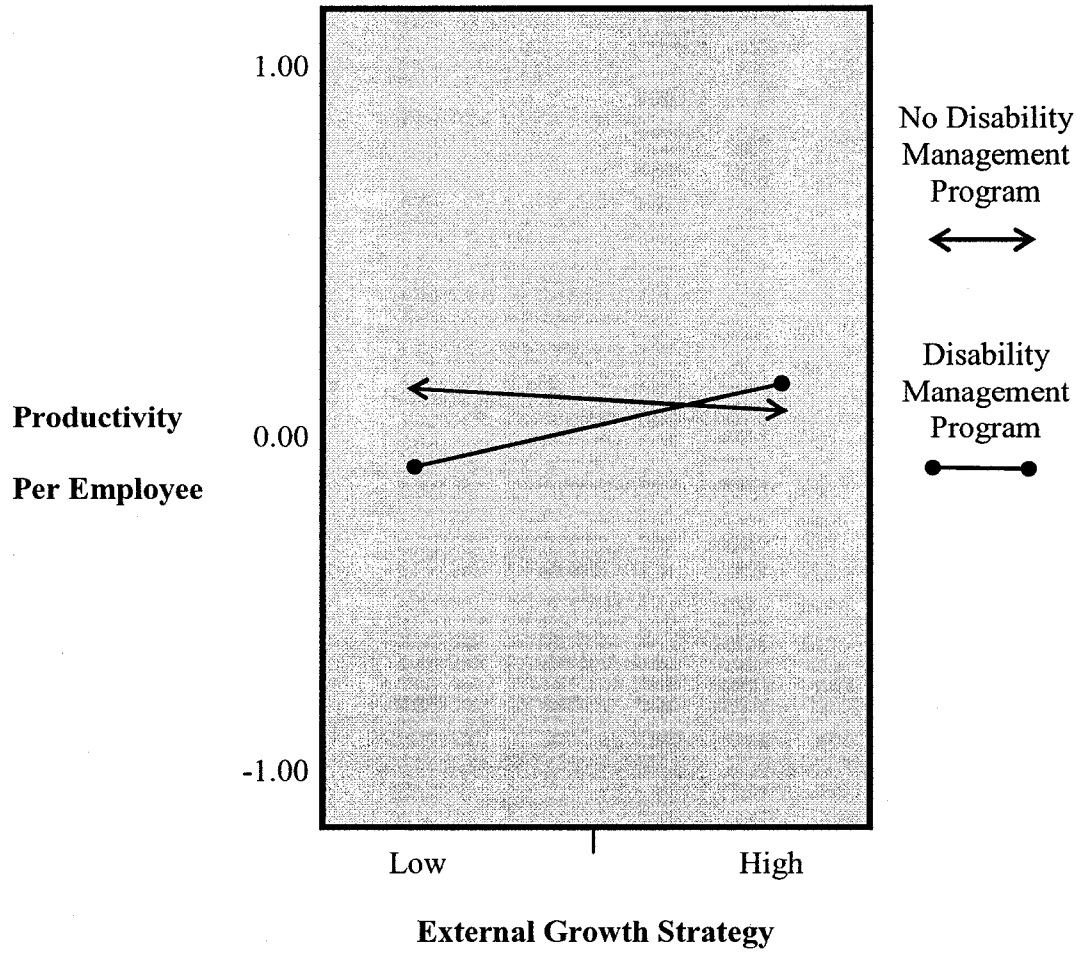
**FIGURE 2.3**  
**Interaction Effects of DM Programs (Career Growth) and Operating Excellence Strategy on Productivity Per Employee**



**FIGURE 2.4**  
**Interaction Effects of DM Programs (Job Accommodations) and External Growth Strategy on Productivity Per Employee**

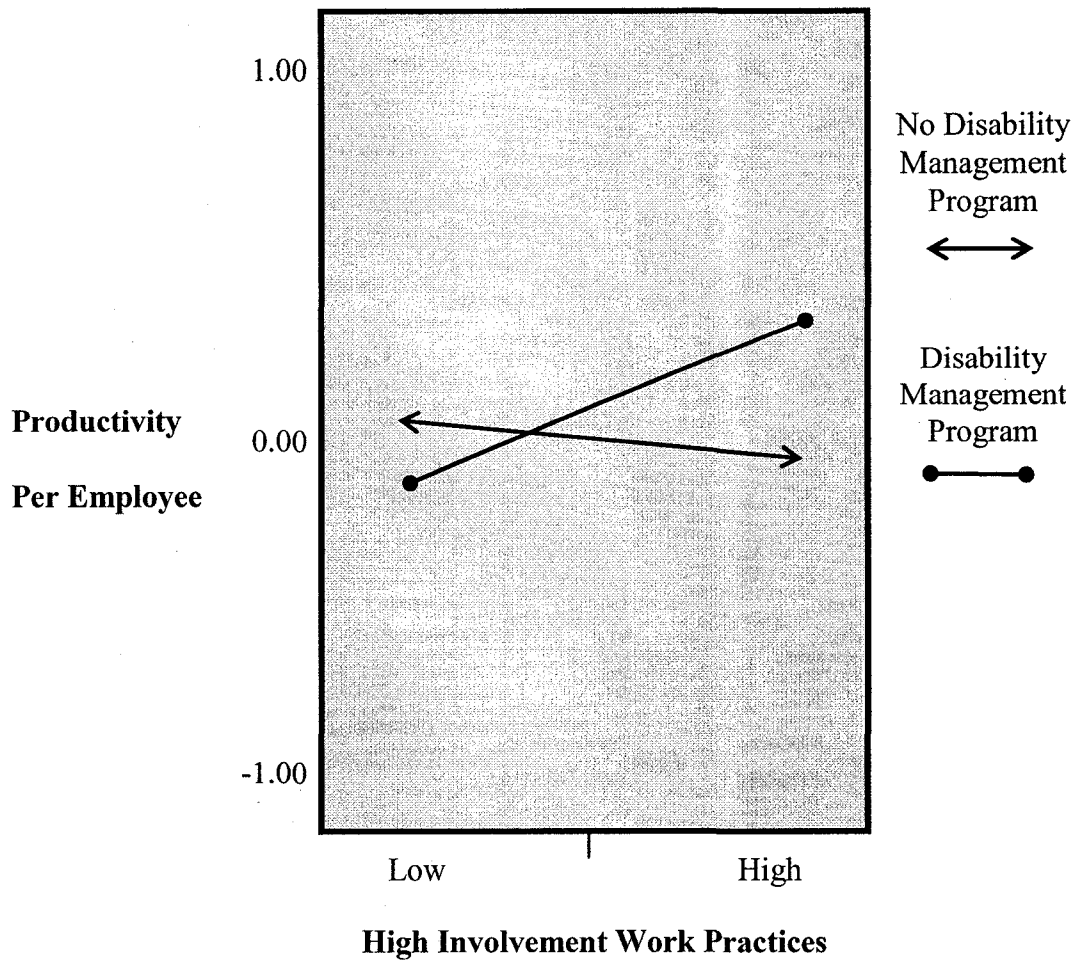


**FIGURE 2.5**  
**Interaction Effects of DM Programs (Career Growth) and External Growth Strategy on Productivity Per Employee**

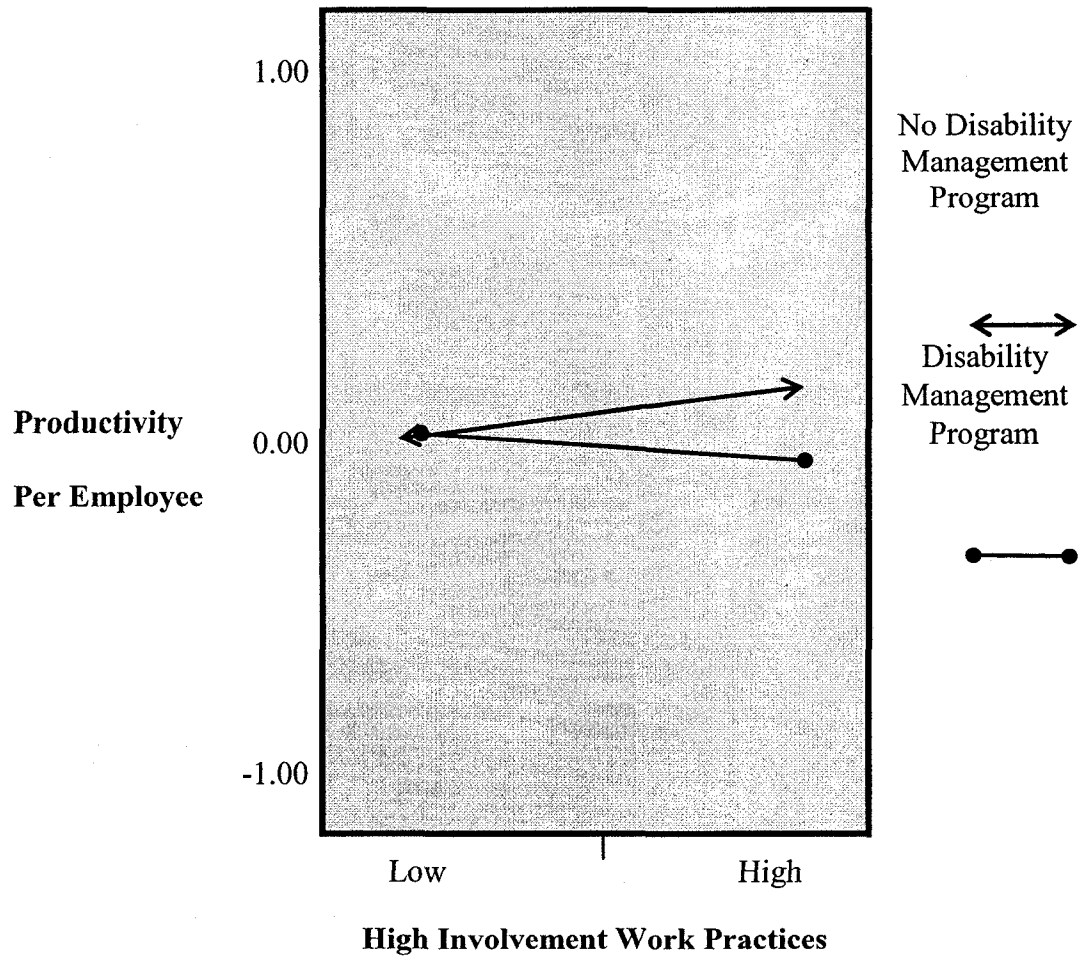




**FIGURE 2.6**  
**Interaction Effects of DM Programs (Job Accommodations) and High Involvement Work Practices on Productivity Per Employee**



**FIGURE 2.7**  
**Interaction Effects of DM Programs (Career Growth) and High Involvement**  
**Work Practices on Productivity Per Employee**



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## CHAPTER 3

### INTRODUCTION

Missing in the literature is a purposeful discussion and full understanding of the role of managers in enacting the provisions of disability management programs. This is a critical concern as managers have front line contact and interaction with the employee through ongoing supervisory relations. In addition, they can be responsible for reorganizing the employee's work to achieve the needed accommodations, and influencing the social dynamics of the work unit to create a work environment that is conducive to the employee's return to work. (Colella & Varma, 2001; Curtis & Scott, 2004; Davis, 2005; Friesen, Yassi & Cooper, 2001; Larsson & Gard, 2003; Matt & Butterfield, 2006; Storrer, 2002). It is fair to say that managers have an important role in helping employees return to work and direct influence on the overall success of employees' reintegration to the workplace, but also that there is little attention given to the performance of these responsibilities. Consequently, although disability management programs may detail provisions for a balanced approach to disability issues, there is limited understanding of whether managers enact those provisions, and what impact their behaviours have on disability management outcomes.

In this study the role of managers in disability management is examined focussing specifically on the relations between disability management policies, manager behaviours, and outcomes (Figure 3.1). To clarify the linkages between these components in the disability management process I investigate two specific issues. First, the impact of supervisor behaviours in disability management relative

to disability management policies is explored. There is reason to expect that disability management behaviours more directly relate to outcomes than does the simple presence of disability management policies in organizations, but there is a clear need in the literature to provide more evidence of this relationship (Larsson & Gard, 2003). Second, the connection between disability management policies and manager behaviours is examined in more depth to understand the relations between the provisions of policies and the performance of aligned behaviours. It is unlikely that managers unilaterally enact the provisions of policies, but a more full investigation clarifies the relationship between policies and behaviours in consideration of the personal factors or corporate or supports that influence that relationship. In sum, the research reports on the antecedents and consequences of disability management behaviours, and the conditions that may constrain or facilitate policy-behaviour-outcome relations (Figure 3.2).

The findings of the study are a contribution to the literature as it is the first direct examination of managerial behaviours as the conduit through which disability management policies impact outcomes. At present, there is very little information about the influence that supervisors have on disability management outcomes, and none about the relations between behaviours and policies. The little that we do know is derived from qualitative research of employee opinions that better supervisor behaviours would be beneficial to the return to work process (Colella & Varma, 2001; Nieusenhuijsen, Verbeek, de Boer, Blonk & van Dijk, 2006). Consequently, the state of the literature is such that the work environment is recognized as an important factor in the success of employee returns to work but the role of manager

in creating that environment through both social and procedural measures is not well substantiated. My research strives to remedy this deficiency.

This chapter is organized as follows. First, the theoretical background for each of the relationships examined in this study is presented. Then, the methods used to obtain the results are set out, and the findings that come from the analyses of data are presented. Finally, the chapter concludes with a discussion of the implications and limitations of my study and opportunities for additional research.

### **POLICY - BEHAVIOUR - OUTCOME RELATIONS**

Policies and procedures are common ways that organizations formally direct the behaviours of managers and employees (Daft, 2006). Although disability management policies and programs have been shown to have a direct effect on disability outcomes (Dyck, 2006; Habeck, Hunt, & VanTol, 1998; King, 1998), I argue that the relation between policies and outcomes is indirect via managerial behaviours. To examine this point of view thoroughly a discussion of policies and behaviours in the literature is reviewed, and grounds for relations between variables using theoretical premises and management concepts are explained. These relations are discussed in six parts: (1) policies in the literature, (2) mapping the behavioural domain, (3) policies as antecedents of manager behaviours, (4) outcomes as consequences of manager behaviours, (5) manager behaviours as mediators of policy – outcome relations, and (6) personal and organizational characteristics as moderators of policy – behaviour relations.

## **Policies in the Literature**

The disability management literature is paradoxically full and empty of information about policies and procedures. The content of disability management policies and procedures is a highly discussed subject. This body of 'best practice' information supports practitioners in making decisions for the implementation and administration of a disability management program (Dyck, 2006; King, 1998; National Institute of Disability Management and Research, 2003). However, there is very little discussion of guiding frameworks or structures to support a taxonomy of disability management practices. Presently, policies are discussed in the round and generally without reference to whether they fall under a rubric of employee or other stakeholder relations, work accommodations, medical supports, etc. For example, Westmorland, Williams, Amick III, Shannon & Rashead (2005) identify systemic differences between policies across workplaces but do not comment on why the differences exist or reasons for implementing some policies over others. Consequently, it is difficult to discern the strategic or even sometimes practical differences of policy statements across organizations, or to identify gaps in the policy directions within an organization.

It is possible to identify some simple differences between the policies. Some of the policies have an orientation towards the social and psychological issues associated with employee reintegration and return to work. These types of policy encourage a relationship-orientation among the stakeholders in the processes of disability management. Examples of such policies are the expectation that the manager will be friendly or empathetic with the employee, and the requirement that



managers be open to ideas and suggestions from other stakeholders (e.g., union representatives). Alternatively, some of the policies have an orientation towards to the administrative processes related to the organization's disability management program. For example, such policies direct managers to revise the employee's job description for the required accommodations, conduct performance assessments on the employee's progress and ability to perform the required work duties, and report to organizational leaders on costs and outcomes, etc.

Although relational and administrative orientations can be identified, the disability management literature and practitioner texts do not yet discuss policies with explicit demarcation for strategic or practical intent. That is, the recommended policies are bundled together into 'best practice' models for implementation as a general and universal package. For example, the importance of attending to employee relationships is emphasized equally to the importance of providing a graduated return to work (work hardening) program for employees. Consequently, as disability management is presently understood and practiced according to non-differentiated policies in the general literature I also do not differentiate between the intent or content of the disability management policies in the following discussions of expected relations.

### **Mapping the Behavioural Domain**

In a disability management context, behaviours refer to those observable acts that are performed directly by managers and contribute to the achievement of employee reintegration and return to work outcomes. Despite broad discussion and examination of manager behaviour in the past 90 years (Borman & Brush, 1993) it

appears that theories of behaviour have not yet been applied to the context of disability management. This is surprising because managers play an important role in the management and reintegration of employees with disabilities (Dyck, 2006). Consequently, while it is generally understood that manager behaviours have an important role there is little explanation of what managers do and how those behaviours influence employee return to work outcomes. Thus, the first step is to identify the behaviours managers perform as part of employee returns to work. This begins with a look at the broader behavioural domain and identification of general patterns of activities that help to describe manager behaviours in disability management. Then, based on these general patterns several clusters are suggested to help organize the wide range of responsibilities that manager's attend to.

A comprehensive review process helped to identify behaviours relevant for employee reintegration and return to work. This process included reviewing past research on general patterns manager behaviours and drawing lists of recommended disability management behaviours from expert sources. A review of 108 dimensions of behaviours reported in the literature (cf. Tett, Guterman, Bleier, & Murphy, 2000) suggests that there are two primary (and broad) categories of management activities. The first category includes behaviours that pertain to administrative / technical aspects of management. Examples of these behaviours include budgeting, planning, policy development, financial analysis and written communication. The second broad category includes behaviours that cover the range of interpersonal activities, such as exhibiting leadership, verbal communication, team building, conflict resolution, and collaborative problem solving. This understanding of managerial

behaviour is consistent with other research that suggests that the management domain consists of both technical and contextual activities (Bauer & Green, 1998; Gellatly & Irving, 2001).

It seems reasonable to extend this understanding of general managerial activities to the specific domain of reintegration and return to work behaviours. Thus, I sought examples of manager behaviours in disability management along these general lines from practitioner texts and disability management experts. More than fifty distinct behaviours were identified through this investigative exercise, and six logical groups help to organize the range of behaviours (Table 3.1). The first three groups focus most directly on supporting the technical aspects of employee reintegration and return to work, and the remaining three groups attend more to relational aspects. Each of the groups is outlined below.

First, planning-type behaviours require the manager to prepare for the integration of the person with disability. This often includes budgeting for training needs, reviewing job functions for possible accommodation, and considering alternative work options for the employee. Second, managers engage in day-to-day (routine) behaviours that consist of supervisory-type activities, such as providing cross-training, monitoring the performance of the employee, and striving to maintain the productivity of the work unit. Third, process management behaviours serve to keep the reintegration process relevant to the employee's needs and abilities. Examples of this type of behaviour include reporting disability management outcomes to executive stakeholders, and monitoring the employee's progress through the program. These behaviour clusters could be thought of as stages in the

administration of a disability management program – getting ready, dealing with the issue, and reporting on outcomes.

The remaining three clusters focus more upon the building of relationships and attending to the psychological and social needs of the employee. The fourth behaviour cluster, of demonstrating active concern and support means building and maintaining trust, helping the employee regain a sense of belonging and personal control, and engaging in regular contact with the employee. Fifth, facilitating participation and involvement entails sharing information freely and appropriately, involving other stakeholders, and seeking external input to the resolution of the disability issue. Sixth, creating a supportive work context requires activities aimed at creating an environment that is supportive, flexible, and beneficial to the person with disability. Examples of behaviours that enhance the work environment are role modeling positive working relationships, and creating a foundation of respect and teamwork. By performing these types of behaviours managers can help to create a positive social environment for the employee's return to work.

Although there are differences in the nature of the various behaviours, they are understood here as a general suite of acts that managers perform when helping an employee return to work. While managers may engage in some behaviours more readily or frequently than others, an assumption in this study is that both kinds of behaviours are important for managing employee disabilities and achieving effective reintegration and return of employees to work. Consequently, in my research I examine the impact of performing all these behaviours on outcomes, not the relative impacts of one type of behaviour versus another.

## **Policies as Antecedents of Manager Behaviours**

A classical view of the organization is a coalition of individuals drawn together by a shared purpose and organized into a hierarchy of decision-makers and staff (Cyert & March, 1963). In this context, policies and procedures reflect the goal orientation and outcome values of the organization's leaders (Hambrick & Brandon, 1988) and clarify the mechanisms and methods that are sanctioned in achieving the organization's preferred outcomes. Given that policies and procedures can be understood as the organization's preferred routes to desirable outcomes (Mintzberg, 1983), manager behaviours can be similarly and simply understood as contributing or not contributing to those preferred states.

In a continuous vein, it is reasonable to expect that policies and procedures for disability management in an organization represent clear messages to managers about the importance, value, and method of managing issues of employee disability. That is, these policies and procedures "reflect [senior] management's attitude regarding disability management [and] establish the parameters for the disability management practice" (Dyck, 2006: 46). The general expectation is that manager behaviours are aligned with disability management policies when the behaviours serve to enact and carry out the directions of the policies. For example, if an organization has a policy for monitoring the performance of returning employees, manager behaviours would be in alignment if they performed a related process (e.g., conducting performance assessments) and not in alignment if they did not perform a related process (e.g., not conducting performance assessments). Thus, it should be possible to understand differences in disability management behaviours across

groups of managers according to the presence or absence of disability management policies in their respective organizations.

### **Outcomes as Consequences of Manager Behaviours**

Research into employee – employer relations indicates that there are positive consequences associated with more involved and engaged supervisors (Eisenberger, Huntington, & Sowa, 1986). Two theories with particular relevance to the relations between manager behaviours and outcomes are organizational support theory (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Rhoades & Eisenberger, 2002) and organizational justice theory (Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Greenberg, 1987). Although conceptually related, these theories are distinct in their explanation of how manager behaviours may help produce disability management outcomes. They also explain employee responses to manager behaviours and potentially why there are differences in outcomes within an organization.

Understanding disability management with a theoretical lens that explains employee behaviour is appropriate as the role of the manager is to facilitate workplace processes that create a positive context for the employee's return to work. The manager cannot force the employee to effectively reintegrate and return to work, they can only create conditions that support the employee's return. In the following pages each of these theories is described and their relevance for understanding how managerial behaviours affect disability outcomes discussed.

*Organization Support Theory.* Fundamental to organizational support theory (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Shore, Barksdale, & Shore, 1995) are the notions of social exchange (Blau, 1964) and the norm of reciprocity

(Gouldner, 1960). The basic idea is that when an employee sees a manager demonstrating genuine concern, care and support, the employee will feel an obligation to reciprocate this goodwill through pro-organizational attitudes (e.g., commitment) and behaviours (e.g., citizenship, attendance, performance) (Rhoades & Eisenberger, 2002). In essence, organizational support theory suggests that employees adjust their attitudes and behaviours to match the level of social and economic support they perceive from their manager. Numerous tests of organizational support theory have confirmed these reciprocal relations (Rhoades & Eisenberger, 2002).

It is reasonable to expect that supportive behaviours by managers will be reciprocated by employees during return to work processes. That is, managers who behave in a way that conveys genuine care and concern for the well-being of the employee will help motivate the employee to respond in kind with enhanced affective commitment (Armeli, Eisenberger, Fasolo, & Lynch, 1998; Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001) and greater desire to remain with the organization (Witt, 1991; 1992). The influence of perceived organizational support may even be strengthened during disability management because employees that are returning from injury or illness can have high socio-emotional needs (Jeppsson-Grassman, 1992), and often feel uncertainty regarding their place or capacity to work in the organization (Stansfeld, Rael, & Head, 1997). Gard and Larsson (2003) provide a clear example of organizational support operating in disability management. They indicate that a manager's willingness to involve employees in key decisions (i.e. fairness), show concern (i.e. supervisor support), and mentor or

coach the returning employee (i.e. organizational rewards and job conditions) are related to both better employment relationships between the employee and manager, and faster rates of employees returning to work. Thus, while organizational support theory has yet to be empirically tested in a disability management context, there are strong reasons to explore the relationship between behaviours that generally increase employee perceptions of support and disability management outcomes.

*Organizational Justice.* Theories of organizational justice (Greenberg, 1987; Greenberg, 1990) are rooted in the notion of subjective perceptions of fairness. The literature often makes a broad distinction between two forms of justice: distributive justice and procedural justice. Distributive justice is concerned with the perceived fairness of outcome allocations (e.g., rewards), and is most closely associated with traditional equity theory (Adams, 1965). Procedural justice, on the other hand, is concerned with the perceived fairness of the process used to determine outcome distributions (Leventhal, 1980; Leventhal, Karuza & Fry, 1980; Thibaut & Walker, 1975). Leventhal and colleagues (Leventhal, 1976; Leventhal, 1980) indicate that there are six determinants of fairness in policies and procedures. In brief, procedurally just decisions/actions are (a) consistent, (b) free of bias, (c) based on accurate information, (d) changeable if shown flawed, (e) ethical, and (f) considerate of other perspectives. In essence, the idea is that “if employees believe that they are treated fairly, they will be more likely to hold positive attitudes about their work, their work outcomes, and their supervisors” (Moorman, Blakely, & Niehoff, 1998: 845). Additionally, if an employee perceives that a decision/action is not procedurally just, they may withhold effort in order to ‘balance’ the situation



(Adams, 1965). Consequently, theories of organizational justice help explain why employees react positively or negatively to management decision processes (procedural justice), and why employees choose to expend or withhold effort in relation to management decision outcomes (distributive justice).

In a meta-analytic review of organizational justice research, Colquitt et al (2001) identified several key consequences of employee perceptions of organizational justice. In particular, they found strong support for a relationship between justice perceptions and employee attitudes and behaviours. For example, both procedural and distributive justices are strongly related to employee commitment and outcome satisfaction. Further, support was found between both types of justice and reduced negative reactions (retaliatory behaviours, theft), and procedural justice predicted reduced withdrawal (absence, turnover, neglect). What this means is that employees generally respond to fair treatment with positive behaviours, but withdraw or retaliate when they perceive unfair treatment.

Applied to disability management procedural justice helps explain the association between manager behaviours and reintegration and return to work outcomes. Most directly, the manager's ability to achieve procedural justice in the decision making process is likely to reduce employee withdrawal behaviour (e.g., resistance to returning to work). Folger (1985) indicates that a key part of procedural justice is providing the employee with a voice in the decision making process. Thus, managerial behaviours that include the employee in addressing disability management issues (e.g., planning job accommodations) may lead to improved return to work rates because the employee is more accepting of the manager's

decision authority (Bies & Shapiro, 1988) and satisfied with the return to work arrangement (Lind & Tyler, 1988). Further, as noted above, Leventhal describes six elements of procedurally just processes. Consequently, an assessment of the supervisor's handling of the disability management process against those elements may inform employee perceptions of (in)justice. For example, incorrect paperwork, case-by-case variance in administrative procedures, and an inability to get 'straight' policy / procedure answers, may contribute to perceptions of unfair treatment by the manager or the disability management system. In this light, the ability of the supervisor to engage effectively in both the procedural and relational aspects of disability management becomes quite important to helping minimize employee dissatisfaction, and perhaps retaliatory behaviours (i.e. rehabilitation to rule, extending the rehabilitation period). Thus, while theories of organizational justice have yet to be fully applied to issues of disability management, it is reasonable to explore a linkage between manager behaviours that encourage fairness in reintegration and return to work issues and disability management outcomes.

### **Manager Behaviours as Mediators of Policy – Outcome Relations**

Evidence for a positive relation between disability management policies and favourable outcomes such as reduced work days lost to employee illness or injury is reported in many studies (Amick III et al., 2000; Cullen, Williams, Shannon, Westmorland, & Amick III, 2005; Habeck, Hunt, & VanTol, 1998; Habeck, Scully, VanTol, & Hunt, 1998; Habeck & Leahy, 1991; Westmorland, Williams, Amick III, Shannon, & Rasheed, 2005). However, these findings do not tell the full story as the statistical models tend to explain a relatively low amount of variance in the

outcomes. For example, Habeck, Hunt, & VanTol (1998) found that policies explained 16% of the outcome variable 'work days lost'. Additionally, these authors note that they have difficulty explaining an important finding of their study – that two policy models yield substantially different outcome results even though the policy statements in the models are highly correlated ( $r = .74$ ). This finding suggests that another variable(s) is also influencing the outcome measure and that it differs from situation to situation. As a cumulative result, the present work on policy – outcome relations helps us to understand that policies and procedures do matter to disability management outcomes, but also leave us without a strong explanation of variance, and presents new questions about other potential explanatory variables.

A fundamental and untested assumption is that policies have their effects on disability management outcomes by regulating the way managers respond in a given situation. Said another way, the role of the manager is to 'translate and enact' the intent of an organization in such a way to influence outcomes. The argument that manager behaviour mediates the influence of policies and procedures on outcomes is simple: in themselves, policies and procedures do nothing. Policies and procedures only have an effect to the extent that they can express intentions and motivate role behaviours. In short, they require an actor or enabler. As an example, Williams (2004) identifies that the tone of manager behaviours and attitudes during disability management activities (rather than the explicit policies) is associated with the likelihood of the process being taken to arbitration. Managerial behaviours, from this perspective, can be viewed as the conduit through which policies influence outcomes.

Given what is generally accepted about the structure of organizations and the role of managers in organizations (e.g., implementation and coordination) (cf. Mintzberg, 1991; Mintzberg, 1979) it is very likely that manager behaviour is a direct link between the organization's disability management policies and procedures and the disability management outcomes.

### **Personal and Organizational Characteristics as Moderators of Policy – Behaviour Relations**

The antecedents of behaviours have received much attention in past decades. As a result, a number of theories have emerged that help to explain why managers act in the ways that they do. Two general explanations of behaviours are that they are responses to (a) personal characteristics (e.g., personality), and (b) organizational characteristics (e.g., culture) (Staw & Ross, 1985; Staw, Bell, & Clausen, 1986; Withey, Gellatly, & Annett, 2005). In the following discussion several personal and organizational characteristics are discussed as they may interact with the organization's disability management policies to influence how these policies are interpreted and enacted as manager behaviours. I begin with personal characteristics of managers and conclude with organizational characteristics.

*Personal Characteristics.* Managers, as a subject group, are relatively ignored in the disability management literature. Their role is regularly constructed in broad terms and little effort is taken to identify or distinguish characteristics that may impede, facilitate, or explain their decisions and behaviours. To illustrate, some research studies ask students to assume the role of manager in order to make various assessments of finely-tuned variances in employee disabilities but give no

consideration to the manager's background, experiences, or preferences in those decisions (Colella, DeNisi, & Varma, 1998; Krefting & Brief, 1976; Rose & Brief, 1979). And, other research studies make only passing or minor mentions even when the research question directly concerns management decisions (Colella, Paetzold, Belliveau, & Hollenbeck, 2004; Stone & Colella, 1996; West & Cardy, 1997). In short, for most disability management studies, managers are assumed to be the same – an untenable assumption that does not reflect the reality of individual differences and the effect of these differences on expressed behaviour.

When organizational direction is not clear or objectives are in conflict, managerial actions can be partly explained by individual characteristics such as knowledge, preferences, and expectations (Campbell, Dunnette, Lawler III, & Weick Jr., 1970; Finkelstein & Hambrick, 1990). Thus, the general omission of the manager's personal characteristics in the disability management literature is an important shortcoming. To partly resolve the gap in the literature, four characteristics (age, conscientiousness, tenure, and disability management experience) that may have significance for manager behaviours and their adherence to organizational directives in disability management are presented and discussed.

The first characteristic is age. Prior research suggests that as part of becoming older, employee flexibility decreases, rigidity increases, and resistance to change become greater (Wiersema & Bantel, 1992). Further, while age is often associated with wisdom and experience, it also shown that older workers are less able to integrate new information (Taylor, 1975), are more likely to avoid risky decisions (Carlson & Karlsson, 1970; Vroom & Pahl, 1971) and have less confidence

in their decisions (Taylor, 1975). As a result, the behaviour of older managers may be less likely to deviate from the policy and procedure provisions of the organization that are familiar to them or more established in the organization.

The second characteristic is conscientiousness. Staw & Ross (1985) direct that personality characteristics have an important influence on individuals' behaviours. Although there is much debate in the psychology literature regarding dimensions of personality, a considerable body of literature has emerged to support the Five Factor Model of Personality (Barrick & Mount, 1991; Tett, Jackson, & Rothstein, 1991). One of these dimensions, conscientiousness (e.g., dependable, thorough, and organized) may indicate a predilection for following the policies and procedures of the organization. Managers with higher scores for conscientiousness are more likely to strictly adhere to disability management policies and procedures than managers whom score lower on this dimension.

The third characteristic is tenure. Tenure may relate to managerial behaviour because of the reinforcing nature of mental structures that people develop with experience in order to organize and simplify the world (Russo & Schoemaker, 1989; Tversky & Kahneman, 1974). Tenure refers to the manager's length of experience in given context. Therefore managers with (a) longer service in a particular organization (organizational tenure) or (b) career history as a manager (role tenure) may be more likely to integrate policies and procedures into their framing biases and behave accordingly. Further, managers with longer organizational tenure have more familiarity with the organization's standing operating procedures, people, and culture (Gupta, 1988; Kanter, 1977), probably have greater commitment to the existing

systems and the status quo (Hambrick, Geletkanycz, & Fredrickson, 1993; Stevens, Beyer, & Trice, 1978) and are biased to general conformity (Finkelstein & Hambrick, 1990). Because of this they are more likely to follow the policies and procedures of the organization.

The fourth characteristic is disability management experience. Having some experience in disability management may embolden a manager to disregard or work outside of the policies and procedures set out by the organization. That is, experience in managing disability management issues may result in an understanding of what to do, when to do it, and how to best accomplish desired outcomes that is different than the generalized direction given by disability management policies and procedures. This perspective is generally left unmentioned in discussions of managers' experiences with disability issues. More often, such discussions suggest that through experience managers break down stereotypes or learn to appreciate the abilities of persons with disabilities (Colella, DeNisi, & Varma, 1997; Colella, Paetzold, Belliveau, & Hollenbeck, 2004; Florey & Harrison, 2000; West & Cardy, 1997) rather than a willingness to work outside of the system. However, despite little discussion in the disability management literature, I suggest that managers interpret the prescriptions of the policies and procedures and engage in behaviours that they perceive as most effective given their day-to-day operational environment.

In summary, the behaviours of managers – and the degree to which those behaviours are aligned with directives of the organization, may be due to the unique characteristics of each manager. As suggested by Peyreffite, Fadil and Thomas (2002: 495) “two managers facing identical environments and heading organizations

with identical resource profiles can make different choices because of their personal characteristics and experiences.” Consequently, it is relevant to see if a relationship between policies and behaviours is moderated by managers’ personal characteristics.

*Organizational characteristics.* The behaviour of a manager in a given situation can be partly explained by his or her perception of the organizational context (Barnard, 1938; Lewin, Lippit, & White, 1939; Simon, 1945). Bowen and Ostroff (2004) also indicate that factors such as the prominence, visibility, or reinforcement of organizational messages (i.e. policies) positively relate to the alignment of employee actions to those messages. Subsequently, it follows that the alignment of manager behaviours with policies may be influenced by contextual features of the organization and the perceived importance or relevance of disability management policies. In the following discussion corporate disability management supports (e.g. training and development) and organizational culture are presented as examples of organizational characteristics that can moderate policy – behaviour relations.

The first characteristic is disability management supports provided by the organization. There are many potential corporate resources or supports that can influence the performance of disability management behaviours. Some examples include placing accountabilities in job descriptions or performance plans, requiring regular reporting on disability management outcomes, and celebrating successful employee returns to work. One of the more commonly recommended supports in professional texts is the provision of training and development for disability management issues. Thus, in the following discussion of corporate disability



management supports I focus on training and development activities to help explain how these supports may moderate manager behaviours.

Training and development refers generally to the practice of organizations assisting their employees to gain new or improved skills and abilities. Often, the main purpose of training and development is to develop employee skills and abilities in order to become or remain competitive with other organizations (Howard, 1995). In recent years, efforts to improve the capacity of employees extends well beyond the traditional classroom training, with new approaches capitalizing on real-life and real-time learning experiences such as coaching, mentoring, and post-situation analysis. The effectiveness of these practices in shaping employee behaviours and work performance is predicated upon a number of factors, not the least of which is the organization's ability to clearly communicate the expectation to employees that the training should be put into practice (Salas & Cannon-Bowers, 2001).

In addition to the actual implementation of disability management policies in organizations, the amount of importance or support given to managers through training and development likely affects the discretionary behaviour freedom felt by managers. As organizations often provide training only for those activities that are of deemed significance (Wexley & Latham, 2000), it is reasonable to expect that such training would underscore the importance of enacting disability management policies. Further, as there are many technical (or non abstract) skills required in disability management (e.g., interpersonal communications, job redesign, legal and financial compliance matters), it is also possible to observe or measure the transfer of training and development concepts into practice. Consequently, organization

sanctioned activities in disability management training and development are likely an important factor in the performance of disability management behaviours.

The second characteristic is organizational culture / psychological climate. A primary role of an organization's culture is to help translate corporate strategy into desired outcomes (Chatman & Cha, 2003). Although the influence of culture is most felt in the absence of rules and procedures, it remains an important influence on disability management because of the way policies and procedures are formulated to reinforce group-desired behaviours (Chatman & Cha, 2003). Hofstede, Neuijen, Ohayv and Sanders (1990) suggest that it is through organizational practices that some norms and values become known. That is, values and beliefs become codified into organizational systems and structures. For example, through policies requiring early contact behaviours by managers, group members may identify and express a value of caring for each other (Schein, 1990). Additionally, a study of disability management behaviours found that an organizational culture promoting a safety orientation had a direct relationship with a decrease in poor safety behaviours (Hofmann & Stetzer, 1996). Subsequently, the culture of the organization may create a normative basis for performing disability management behaviours in addition to prescriptive policy requirements.

Shared perceptions of norms (i.e. behaviour guidelines) and values (i.e. enduring preferences) form the basis of organizational culture (Rokeach, 1973; Rousseau, 1990; Weiner, 1988). However, it is important to recognize that while often discussed a single concept, it usually consists of multiple dimensions (Kopelman, Brief, & Guzzo, 1990). For example, Muchinsky's (1977) scale

describes six dimensions of interpersonal milieu, standards, affective tone toward management/organization, organizational structure and procedures, responsibility, and organizational identification. Interpersonal milieu indicates the interpersonal relations environment that prevails in the organization. The dimension of standards describes the feeling that the organization has established the standards of performance. General affective tone toward management/organization identifies the perceived image of management and relations between managers and subordinate staff. Organizational structure and procedure identifies the feelings people have related to processes and things done in the organization. Responsibility indicates feelings concerning assignment of accountability for accomplishing a task. Finally organizational identification describes the feelings of being a part of the organization. Together, these dimensions of culture may explain differences in manager behaviours. A manager working in a culture of high levels of personal relationships with staff may be more likely to perform more expressive or interpersonal behaviours. Or, a manager's meticulous enactment of policies may be a reflection of the culture's valuation of structure, rule following, and managerial accountability.

While culture helps to explain group behaviour, it is important to note that individual behaviour may also be influenced by their unique perceptions of the organization's culture (psychological climate). That is, managers understand their work environment based on personal assessments of the work context (e.g., culture, size, structure) and each manager's behaviour is then attuned to that climate (Burke, Borucki, & Hurley, 1992; Jones & James, 1979; Kopelman, Brief, & Guzzo, 1990).

Although technically different, culture and climate can be evaluated on the same dimensions. The primary difference is that climate measures the individual manager's understanding of workplace norms and values, and culture represents the aggregation of those understandings into a group construct (Parker et al., 2003). In the context of this discussion, culture and climate are used interchangeably to refer to a cognitive determination of appropriate action or behaviour based on norms and values.

As a manager's behaviour may be informally directed or guided by their psychological climate, I suggest that the enactment of policies is influenced by the manager's understanding of the norms and values in the organization.

To review, the behaviours of managers may be influenced by the work environment that they operate within. The degree of organizational support or resources given to disability management may accentuate or hinder the performance of disability management behaviours. As well, the nature of relations between staff and perceptions of norms and values in the organization may influence managers' interest or willingness to carry out the policies of the organization. Consequently, it is relevant to see if a relationship between policies and behaviours is moderated by organizational characteristics.

### **Summary**

The behaviours managers perform in disability management and the impact of those behaviours is not clear. Based on a review of the general management behaviour literature and the knowledge of disability management experts, I identified six categories of behaviours in disability management. These categories are

presented as components of a complete suite of disability management behaviours. The relation of these behaviours to disability management outcomes is supported by two social exchange theories. First, organizational support theory (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Shore, Barksdale, & Shore, 1995) directs that manager behaviours send messages of support and care to employees which are reciprocated with positive employee attitudes and behaviours. Applied to disability management, I suggest that disability management behaviours demonstrate support and care to employees which is reciprocated with better employee engagement in the return to work process. Second, organizational justice (Greenberg, 1987; Greenberg, 1990) directs that manager behaviours influence employee perceptions of distributed and procedural justice, and that employees react on the basis of their fairness perceptions. In terms of disability management, behaviours that support perceptions of justice in return to work processes and may encourage better reintegration efforts by employees and minimize retaliations.

The role of manager behaviours as a mediator of policies and procedures on disability management outcomes is also suggested. The performance of behaviours may be related to the provisions of disability management policies, and may also be influenced by the manager's personal characteristics and characteristics of the organization. This section provided theoretical and conceptual reasons for relations between these variables. The methods used to test those relations are described next.

## METHODS

In this section I describe key features of the research methodology, including sample and data collection, variable measures, and analytic strategy. Each of these elements is described in turn.

### **Sample Population**

The target population for this study is individuals in Canadian organizations that have responsibility for and experience with helping employee reintegrate and return to work. Multiple roles define this population, ranging from direct supervisors and managers to human resource professionals to disability management specialists. Although frequently involved in employee reintegration and return to work, non-managerial respondents such as members of the medical (e.g., physiotherapist), legal (e.g., arbitrator), and insurance (e.g., claims consultant) communities were excluded from the target population. The focus on managers as survey participants is intended to clarify the performance of disability management behaviours as the managers' understand them. In Chapter 1 I noted that disability management can be described as a network of black boxes with stakeholders often uncertain of the activities occurring in the other boxes. Consequently, while it may be useful to triangulate managers' performance of behaviours with employees' perceptions of those behaviours, it is unlikely that employees are fully aware of all the behaviours being performed (e.g. workplace respect discussions with employees' colleagues, liaising with disability management experts / stakeholders, reporting on progress to executives).

A total of 183 responses were collected from participants. After removing partially completed surveys from the sample (17), and filtering responses for managers/supervisors (versus other roles), the sample population for this study is 116 supervisors or managers with direct disability management experience. To verify that this sample population is representative of the total collected responses the mean scores of several demographic characteristics were compared for the participants included and excluded from the sample population. This is to ensure that there are not significant differences between the participants included in the analyses and those excluded (i.e. non-supervisory role) or not completing the questionnaire. The results of the t-tests show that there is not a significant difference in the samples based on the respondent's age ( $p < .27$ ) or gender ( $p < .13$ ), nor on the industry they participate in ( $p < .34$ ). Thus, it is reasonable to expect that there are not systemic differences between the full responding group and the sample population analyzed for this study.

### **Data Collection**

A snowball sampling method was used to generate the sample population. This method involves the referral of new participants in the survey by existing participants (Heckathorn, 1997). The snowball method is considered most appropriate when there is an expected difficulty in locating respondents with the desired experiences. Although the size of the target population should be growing due to the increasing rate of employee leaves for illness and injuries as well as greater organizational attention to disability management practices, it is still difficult to locate and develop a suitable population sample. This is because unlike some

other management issues, many organizations do not have a designated official (e.g., disability management specialist) responsible specifically for disability management programs and thus cannot direct surveys forward to appropriate managers. Further, organization-based searches to find direct supervisors and managers and other organizational actors with suitable experiences in disability management would lead to considerable search costs with little guarantees of an acceptable sample size. Thus, a snowball approach, where respondents refer others to the survey, was implemented as the best approach for developing the sample population of this study.

Administration of the survey to the target population followed the procedures outlined by Dillman (1978; 2000). For example, extensive attention was given to the content of the initial message and introduction letter in order to encourage appropriate participation and inform potential respondents the purpose and value of the survey. Potential ethical and confidentiality concerns were also addressed in the introduction letter. To encourage survey responses and to prompt participants to forward-on the survey, scheduled reminder and 'please forward' emails were distributed at two intervals spaced one month apart. Following these general procedures helped potential respondents become well informed about the survey prior to participating and encouraged participation.

Two associations started the sampling snowball. The National Institute for Disability Management and Research (NIDMAR) sent a direct email to its broader distribution list expressing its support of the research question and questionnaire. The Human Resource Institute of Alberta (HRIA) included a notice of the questionnaire as part of an email communications to its membership. The survey



was web-based and hosted on the University of Alberta computer network, and the emails directed recipients to visit a secure survey website linked in the email. The solicitation message in both emails a) helped the recipients to self-select their level of participation, and b) encouraged recipients to forward the email on to other colleagues that may be able to participate. Approximately half of the completed surveys were a result of these initial solicitations with the other half coming from colleague referrals. Although most of the respondents were expected to be based in Canada, and most likely residing in Alberta, the ease of sharing electronic communications presented the issue of international responses. The questionnaire included a question on the respondent's location that could be used to filter international responses if required.

The self-administered questionnaire gathered information on company and respondent demographics, respondent experiences with disability management situations, and employee return to work information. In some cases, respondents entered alpha-numeric data (e.g., number of employees in the organization, additional comments) to provide contextual information, but most questions required a response on a Likert-type scale. The core of the questionnaire focused on the a) policies that organizations have in place, b) behaviours performed by managers, and c) the manager's perception of outcomes achieved by return to work processes. In answering the questionnaires, participants were asked to reflect on their most recent disability management situation and respond according to that experience. A copy of the questionnaire is presented in the Appendix 3.1. The development and use of

questionnaire items in the study is discussed in more detail in the forthcoming measures and scale development section.

### **Research Ethics**

Addressing potential ethical issues in management and social science research is a paramount concern. In the covering letter of the survey, the purpose of the research, how the survey would be handled and how the information would be used were clearly explained. Respondents were assured that participation was voluntary and that all personal and company identification (e.g., email address, business name) would be held in strict confidence. To support the assurances of confidentiality, the web-survey was hosted on the University of Alberta's computer network with significant security and access controls. The confidentiality of the data was also preserved by limiting access of the survey data to myself and my supervisory committee, as well as by only presenting data generally and on an aggregate basis. As an incentive for completing the questionnaire, respondents were promised a copy of the summary findings, once available. Further, copies of these findings were promised to the associations that assisted with the distribution of the survey. Throughout the process, the University of Alberta's Ethics Guidelines were strictly followed.

The sample and data collection processes outlined above helped to quickly generate a relatively small, but acceptable sample size of 116 respondents. The sample is not representative of the entire population of managers and others involved in employee reintegration and return to work, but is considered suitable for developing insights into the behaviours and perceptions of that population. The

approaches used to measure and then analyze their questionnaire responses are described next.

## **Measures**

The study is an initial examination of disability management policy - behaviours - outcome relations. The descriptions of the measures presented below reflect a broad list of items asked in the questionnaire. Some of these measures are refined or clarified further through statistical methods such as factor analysis and tests for scale reliability prior to the production of descriptive and inferential statistics. A summary description of each variable's measurement item(s) is presented below, and the full list of variables and measurement items is presented in the Chapter Appendix 3.1. Becker (2005) recommends that control variables are applied to statistical models only when there are logical or statistical grounds for including them in the analyses. As this investigation is first step in understanding manager behaviours in organizations, and as the sample size is relatively small, I elected not to include control variables in the regression models.

As part of developing the measures for this study, two analyses were used to examine the variables with multiple measurement items for the appropriateness of combining these items into scales. First, for those variables without a priori factor groups described in the extant literature (e.g., DM Behaviours), principle components factor analysis with varimax rotation is used to determine if there are underlying factor groups of the measurement items (Pedhazur & Schmelkin, 1991; Abdi, 2003b). A factor score of .40 is required for including a measurement item in a factor group (Tabachnick & Fidell, 1996). Included in the factor analyses are tests

for the Kaiser-Meyer-Olkin measure of sampling adequacy, the Bartlett test of sphericity. These statistical tests help determine if the use of a factor model is appropriate for each collection of measurement items (Bryant & Yarnold, 1995). The Kaiser-Meyer-Olkin measure of sampling adequacy tests whether the partial correlations among variables are small. A result greater than .70 on this test indicates sufficient sampling adequacy for the factor analysis to proceed. Bartlett's test of sphericity tests whether the correlation matrix is an identity matrix, which would indicate that a factor model is inappropriate for the data. A result of  $p < .05$  on this test indicates that there is strong evidence of inter-item correlation, and thus a greater likelihood that factor groups would be identified.

Second, for variables with factor groups determined by factor analysis or described in the extant literature, (e.g., conscientiousness), scale reliability estimates are determined to ensure that the variables have the necessary psychometric properties to be used together in a scale (Cronbach, 1951). Variables with a Cronbach alpha less than .70 will be excluded from further analysis in this study as such a result is interpreted as an insufficient degree of inter-item correlation for the items to be included in the same variable construct.

*Disability Management Outcomes.* Six items are examined as outcomes of reintegration and return to work efforts in an organization. All are measured on a 7-point Likert scale ranging from Strongly Disagree to Strongly Agree. Example items are “almost all injured or ill workers rehabilitate and return to work,” “almost all injured or ill workers effectively reintegrate into their job,” and “there are few conflicts or disputes with injured or ill workers about processes, expectations, or

personal treatment.” (See the DM Outcomes section in Appendix 3.1 for all outcome measurement items.)

Principal components factor analysis with varimax rotation of the six outcome measurement items revealed that one factor explains 53.84% of variance in the items (Table 3.2). The Kaiser-Meyer-Olkin and Bartlett test of sphericity confirmed the factor group was statistically valid. The Cronbach alpha score of reliability for this scale is .73. The six item scale is presented as Table 3.3, and reflects a successful outcome for the reintegration and return to work process.

*Disability Management Behaviours.* Twenty behaviour statements ask how often respondents engaged in certain behaviours. The behaviours are measured on a 5-point scale recommended by Amick et al. (2000) ranging from ‘Never’ to ‘Every Time’. To cover a range of behaviours, the questionnaire presents respondents with statements representing a variety of disability management activities. A few examples are “monitor the injured worker's progress through the entire return to work period,” “conduct performance reviews of the employee”, and “build and maintain trust with the injured worker.” (See the Role Behaviours section in Appendix 3.1 for all behaviour measurement items.)

Principal components factor analysis with varimax rotation of the twenty behaviour measurement items revealed that five factors explain 69.40% of variance in the items (Table 3.4). The Kaiser-Meyer-Olkin and Bartlett test of sphericity confirmed the factor groups were statistically valid. However, Costello & Osborne (2005) recommend that only factors above the break on a scree plot are taken as factors for the data. In this case, only the first factor met this condition. The

Cronbach alpha score of reliability for this scale is .93. The eleven items that comprise this factor and reflect a range of behaviours are listed in Table 3.5. This scale indicates effort put forward by managers to support and encourage an effective return to work process.

*Disability Management Policies.* The disability management policies of an organization were measured with twelve policy statement items. These items are scored on a 7-point scale that is anchored on either end with a descriptive statement. One anchor point describes a policy statement that is common in the disability management literature, and the other anchor describes a direct opposite statement. A high score on the scale indicates a high emphasis on a policy statement and a low score indicates a low emphasis on the policy.

The questionnaire presents respondents with a variety of policy statements. Two examples are “the organization’s policies and procedures expect me to regularly evaluate the employee’s performance for capacity and training needs,” and “the organization’s policies and procedures expect me to express a lot of concern or support for the employee.” (See the Policies and Procedures section in Appendix 3.1 for all policy measurement items.)

Principle components analysis with varimax rotation produced four rotated factors explaining 63.61% of the variance in the items (Table 3.6). The Kaiser-Meyer-Olkin and Bartlett test of sphericity confirmed the factor groups were statistically valid. As with disability management behaviours, only the first factor was above the break on the scree plot and thus taken as a factor for the data (Costello & Osborne, 2005). The Cronbach alpha score of reliability for this scale is .76. The

seven items that comprise this factor are listed in Table 3.7, and reflect a range of policies that are common in disability management. This scale indicates the organization's level of support towards a quality return to work environment for the employee.

*Personal Characteristics.* Four aspects of personal characteristics were measured in the questionnaire. The measurement items for each variable listed below are presented in the Personal Profile section in Appendix 3.1.

First, age is measured as a continuous variable assessed by asking the respondent to list their year of birth, which is then subtracted from the survey date to determine their age in years.

Second, conscientiousness is one of the Big Five personality dimensions and is measured using items from the NEO-FFI (Costa Jr. & McCrae, 1992) which requires respondents to indicate the degree of agreement or disagreement with self-descriptive statements. Six statements on the dimension are presented to participants on a 7-point scale (1 = Strongly Disagree; 7 = Strongly Agree). As the measures of conscientiousness are based on the published literature, scale reliability analysis was conducted directly on the prescribed construct-measurement item combinations. The Cronbach alpha scores for the full six item scales was low at  $\alpha = .58$ . However, removing half of the items resulted in a scale with a Chronbach alpha score of .71. The three item measure of conscientiousness is listed in Table 3.8.

Third, tenure, is a continuous variable assessed by asking respondents to list the calendar year that they starting working for their current organization. The date

provided is then subtracted from the survey date to determine the number of years of tenure.

Fourth, DM experience, is a continuous variable assessed by asking respondents to list the calendar year that they first responded to an employee return to work issue. The date provided is then subtracted from the survey date to determine the number of years of experience.

*Organizational Characteristics.* Two types of organizational characteristics are measured through the questionnaire. The first variable, DM supports, is measured with eight items for the various training and development mechanisms and other corporate practices that organizations can use to support managers in performing disability management behaviours. The items are measured on a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree). Principal components factor analysis with varimax rotation revealed one factor explaining 58.3% of variance in measurement items (Table 3.9). The Kaiser-Meyer-Olkin and Bartlett test of sphericity confirmed the factor groups were statistically valid. The Cronbach alpha score of reliability for this scale is .93. DM Supports is measured with an 8-item scale (Table 3.10). This scale reflects the organization's direct efforts at ensuring that policies for employee returns to work are communicated and properly enacted.

The second variable, climate, is measured with a modified version of Muchinsky's (1977) scale for psychological climate. The scale is reduced in this study to include only the factors and items most applicable to the research question, thus twelve items loading on three factors (Interpersonal Milieu, Affective



Management, Responsibility) are included in the questionnaire. Respondents indicate their agreement or disagreement to statements of their organization's climate on a Likert 7-point scale (1 = strongly disagree, 7 = strongly agree). As the climate constructs for responsibility, affective management, and interpersonal milieu are based in the published literature, scale reliability analysis was conducted directly on the prescribed construct-measurement item combinations. The Cronbach alpha scores reveal that while the interpersonal milieu ( $\alpha = .82$ ) and affective management ( $\alpha = .87$ ) constructs have strong internal reliability, the Responsibility construct ( $\alpha = .63$ ) was not sufficiently strong. Thus, only Interpersonal Milieu and Affective Management climate constructs are included in future analyses. The measurement items for these two remaining constructs are presented in Table 3.11. Interpersonal Milieu indicates a general goodwill amongst employees and positive perceptions of the working environment. Affective Management indicates the quality of relations between employees and managers in the organization.

In total, the questionnaire measured responses on nine variables to inform the relationships between disability management policies, managerial behaviours, and disability management outcomes. In the next section, I describe the planned approach to statistical analyses in the study.

### **Analytic Strategy**

In this section I describe the approaches that determine the statistical nature of the variables and the relationships between the variables. Two forms of analyses are undertaken: a) descriptive statistics, and b) regression analyses. Each type of analysis is discussed in turn.

*Descriptive Statistics.* Descriptive statistics reveal the basic features of the study's data and provide simple summaries about the samples and measures (Trochim, 2000). Univariate descriptive statistics of central tendency (i.e. mean) and dispersion (i.e. standard deviation) are presented for each variable in the study. A bivariate correlation matrix indicates the general relationship between variables, including the direction, magnitude and statistical significance of the relationship. A review of the correlation coefficients also determines if the relationships between variables provide sufficient empirical support for proceeding with tests for mediation (Baron & Kenny, 1986).

*Regression Analyses.* These analyses support the examination of the expected relationships outlined earlier in the chapter. To comment fully on these expectations it is necessary to provide evidence that these relationships are not the product of chance. They are tested using linear regression models with the ordinary least squares approach to fitting the data to a linear model. These regression models permit an examination of the effects of independent variables on the given dependent variable alone, and when appropriate, the iterative effects of additional blocks of variables (e.g., interaction terms). Taking a least squares approach enables the fitting of a line to the data that minimizes the sum of the squares of the residuals from the regression line (Abdi, 2003b). This means that the regression line represents a best fit scenario for the data based on the overall placement of the line relative to the actual data points for each case. In these regression models, the dependent and independent variables are standardized and centred (i.e.  $M = 0$ ,  $SD = 1$ ). Standardizing the variables removes the influence of measure scale on the magnitude of the coefficient

(Aiken & West, 1991: 35). These steps aid the interpretation of the results (Tabachnick & Fidell, 1996).

Tests for mediation and moderation follow the procedures described by Baron and Kenny (1986) to ensure both the proper theoretical positioning of these influences and the statistical treatment of the variables in the model. Plus, as recommended by Aiken and West (1991) where interaction terms are required each variable is standardized and centred prior to being computed into an interaction term.

## **RESULTS**

The findings of my investigation for the two research issues are presented in this section. The first issue concerned relations between disability management policies in organizations, performance of disability management behaviours by supervisors, and the achievement of disability management outcomes. The second issue concerned relations between disability management policies in organizations and the performance of disability management behaviours by supervisors, including the influence of personal or organizational characteristics on that relationship. The results of the descriptive statistic analyses are presented first and followed by the results of the inferential statistics.

### **Descriptive Statistics**

The univariate statistics and bivariate correlations are presented in Table 3.12. The mean and standard deviation statistics suggest that the data is normally distributed across the range of responses.

Four sets correlations are discussed in more detail to describe important features of the data. First, the positive and significant relationship between DM

Policy and DM Behaviours ( $r = .34, p < .01$ ) provides support for a relationship between organizational emphasis on disability management policies and the frequency of behaviours. Second, the positive and significant relationship between DM Behaviours and DM Outcomes provides support for a relationship between the frequency of behaviours and disability management outcomes ( $r = .51, p < .01$ ). Third, the three significant relationships between DM Policy, DM Behaviours, and DM Outcomes indicate that it is reasonable to expect that the mediating effect of behaviours will be supported (Baron & Kenny, 1986). Fourth, except for high correlations between the two climate variables (affective management and interpersonal) the independent variables were not strongly correlated. This result reduces concerns of multicollinearity in the data (Jobson, 1991).

### **Regression Analyses**

Six sets of relations are tested with linear regression modeling. The results of these tests are described below and the corresponding data are presented in Tables 3.13 through 3.17. I present the results in the following order: (1) policy – behaviour relations, (2) behaviour – outcome relations, (3) policy – outcome relations mediated by behaviours, (4) policy - behaviour relations moderated by personal characteristics, and (5) policy – behaviour relations moderated by organizational characteristics.

The first results are for the test of policy - behaviour relations (Table 3.13). The data for the regression model show that the frequency of disability management behaviours is predicted by emphasis on disability management policy ( $b = .21, p < .05$ ). The portion of explained variance in the model is somewhat low ( $r^2 = .14$ ) suggesting that there are other variables that also influence manager behaviours in

disability management. These results indicate that there is a positive relationship between policies and behaviours, and thus provide evidence that manager behaviours correspond to disability management policies.

The second results are for the test of behaviour – outcome relations (Table 3.14). The results show that DM Behaviours has a positive and significant effect on DM Outcomes ( $b = .79, p < .001$ ). The portion of variance in the model explained by DM Behaviours ( $r^2 = .26$ ) is relatively large considering the number of other likely (but not modelled) influences upon employee return to work decisions during the reintegration and return to work process. These results indicate that there is a positive relation between increased frequency of manager behaviours and disability management outcomes, and thus provide evidence that manager behaviours are an important part of disability management processes.

The third results are for the test of policy – behaviour – outcome relations. For mediation to be proven there two conditions that must be met: predictive relations for the variables, and disruption of the main effect by the mediating variable (Baron and Kenny, 1986). Thus, predictive relations must be shown for DM Policy on DM Outcomes, DM Policy on DM Behaviours, and DM Behaviours on DM Outcomes. Second, the predictive relations between DM Policy and DM Outcomes must be reduced when DM Behaviours is included in the regression model. In the first analysis above the predictive relationship between DM Policy and DM Behaviours was established. The predictive relationship between DM Policy and DM Outcomes ( $b = .57, p < .001, r^2 = .13$ ) is shown in step 1 of the regression model (Table 3.15). When DM Behaviours is introduced in step 2, the DM Behaviours

coefficient is positive and significant ( $b = .63, p < .001$ ), the explained variance increases ( $r^2 = .32$ ) and DM Policy loses some magnitude and some significance to become ( $b = .33, p < .05$ ). This result indicates that DM Behaviours partially mediates the effects of DM Policy on DM Outcomes.

The results of this test for mediation provides general support for the role of disability management behaviours as a mediator between disability management policies and outcomes. This is conceptually consistent with the role of the manager in the disability management process. The partial mediation indicates that while disability management behaviours is the more potent predictor of outcomes, organizational emphasis on disability management policies is still important. Taken together, the results suggest that rehabilitation and return to work outcomes are better when organizations emphasize their disability management policies and managers frequently perform disability management behaviours. That is, both are important contributors to disability management outcomes.

The fourth results are for the test of policy – behaviour relations moderated by personal characteristics (Table 3.16). This is an examination of the relations of between policies and behaviours across the individual ranges of several personal characteristics. Of the four personal characteristics, only Tenure reached significance as an interaction term with DM Policy ( $b = -.22, p < .05$ ) and explained a relatively small amount of variance in DM Behaviours (change  $r^2 = .03$ ). This result indicates that increases in emphasis on policies are likely to lead to decreases in disability management behaviours for employees that have more years of service with the organization. The interaction term is plotted in Figure 3.4, and illustrates

the difference that low and high manager tenure can have on disability management behaviours. For example, when there is low emphasis on policies, managers with high tenure perform disability management behaviours more frequently than low tenure employees. However, at the midway point, high and low tenure are almost equal, and in a high emphasis environment, the positions are reversed.

The non-significance of the Age interaction term ( $b = .06, p > .05$ ) is not entirely unexpected. However, the non-significance of DM Experience ( $b = .01, p > .05$ ) and Conscientiousness ( $b = .03, p > .05$ ) in interaction with DM Policy is much more surprising. For DM Experience, it is logical that greater experiences with disability management situations would positively influence the frequency of behaviours, particularly in the low disability management policy emphasis environment. However, the non-significance of the DM Experience as a direct effect or as an interaction term may be an indication that such experience does not influence the frequency of disability management behaviours. That is, experience may reinforce a pattern of given behaviours rather than lead to changes in the pattern of behaviours. For Conscientiousness, it is logical that attention to completing task and being accountable for results would positively interact with greater emphasis on disability management policy to motivate more disability management behaviours. However, it may be that more conscientious managers perform disability management behaviours because there are policy provisions for them in the organization regardless of the emphasis the organization gives to those policies.

The fifth results are for the test of policy – behaviour relations moderated by organizational characteristics (Table 3.17). This is an examination of the relations of

between policies and behaviours across the individual ranges of a two organizational characteristics. Of the three organizational characteristics, only Affective Management Climate reached significance as an interaction term ( $b = .34, p < .05$ ). This result suggests that managers are more likely to perform disability management behaviours in an environment where there are more favourable working relationships between managers and employees. However, it is instructive to look at the interaction terms plotted in Figure 3.5. In this chart, the above results are apparent, that the frequency of disability management behaviours is greater in greater in a high policy emphasis environment, and that there is an interaction of the policy environment with the level of affective management climate. Surprisingly, in a low emphasis on disability management policy environment, the frequency of disability management behaviours is greater when there is a corresponding low affective management climate. Indeed, the level of behaviours is almost the same as in the high policy environment. In contrast, when there is a low policy environment and a high affective management climate, the frequency of behaviours is considerably lower. This finding suggests that a low policy environment and a high affective management climate interact to minimize the performance of disability management behaviours.

The non-significance of Interpersonal Milieu ( $b = -.26, p > .05$ ) is surprising given the result for Affective Management Climate. Although these climate constructs are statistically distinct, conceptually they are similar in they both attend to interpersonal relationships. However, in light of the organization's emphasis on employee return to work policies this result is also logical in that managerial



behaviours would be informed more by the general nature of manager-employee relationships than the general employee-colleague relationships in the organization. Also surprising is the lack of significance for DM Supports ( $b = .11, p > .05$ ), particularly given its statistical significance as a direct effect on DM Behaviours ( $b = .22, p < .05$ ).

Overall, some evidence of moderation is found. The results show that manager behaviours in disability management can be influenced by personal and organizational characteristics. However, some caution should be taken when examining the results as several logical interactions were not supported suggesting that further refinement of the measures may be required.

### **Summary**

This section reported on the relationships between disability management policies, disability management behaviours, disability management outcomes, and manager and organizational characteristics variables. Overall, the results indicate that a) emphasis on disability management policies predicts the frequency of manager behaviours, b) the frequency of disability management behaviours predicts disability management outcomes, and c) there is a partial mediating role for disability management behaviours on the influence of policies on outcomes. Limited support was found for the moderating role of organizational characteristics and manager characteristics on the effects of disability management policies on disability management behaviours. The implications of these findings are discussed in the next section.

## DISCUSSION

This study explored two issues novel to the disability management literature: What is the role and impact of manager behaviours in disability management, and how are manager behaviours influenced by disability management policies? To answer these questions, a research methodology was developed to examine the variables that appeared most closely involved or related to the organization's response to reintegration and return to work issues. Specifically, scales for disability management outcomes, policies, and manager behaviours were constructed and the relations between these variables were examined. The link between policies and behaviours in the context of the manager's personal characteristics and the organization's characteristics was also explored. Based upon data provided by a self-response survey of managers, descriptive and inferential statistics revealed interesting and important relationships that help to answer the research questions.

The central finding of the study is that disability management outcomes are improved when managers' perform disability management behaviours. Although not entirely surprising, this result remains a clear contribution to the literature. Some qualitative research with supervisors and employees indicate an understanding that behaviours make a difference in return to work outcomes (Gard & Larsson, 2003), but this study appears to be the first research to empirically show this result. This finding is consistent with both the perceived organizational support and organizational justice literature. While not able to prove that employees feel supported by these behaviours and thus strive for more effective reintegration to the workplace, the results show that manager's performance of supportive and fair

behaviours does predict better returns to work. One interpretation of this finding is that effective disability management requires full involvement from both managers and employees, and that performing these behaviours (whether motivated by policy or not) can draw managers more fully into the process resulting in a greater quality return to work environment. More research drawing upon social exchange theories is clearly required, but these findings present reasons for exploring manager behaviours in more depth.

The importance of disability management behaviours is further highlighted by the confirmation that such behaviours partially mediate the influence of organizational emphasis on disability management policies on reintegration and return to work outcomes. To attain this finding it was necessary to first show that policies influenced manager behaviours. Because there is a wide range in the level of self-reported behaviours, it is instructive to learn that policies do shape behaviours. While some managers may voluntarily or instinctively perform the assessed behaviours, this is not the case for all managers. Subsequently, there is more clear rationale for organizations interested in increasing the performance of these behaviours across their management staff to implement policies that call for those behaviours.

The mediating role of behaviours in policy – outcome relations also provides evidence to negate a potentially competing model that policies and behaviours each have independent effects on outcomes and that it not necessary to consider a relationship between policies and behaviours when explaining outcomes. Although the mediation effect is only partial, it illustrates the relative importance of policies

and behaviours to achieving favourable outcomes and reinforces the role of managers in disability management.

Also of interest is the limited evidence in support of personal and organizational characteristics as moderators of the policy – behaviour relationship. Although the most surprising findings are the lack of significant interaction effects for increased disability management experience and increased disability management supports in the organization, it is possible that these results are a product of the limited sample size rather than a definitive statement of their irrelevance to their influence on policy – behaviours relations. Conceptually, it makes sense that more experience and greater support would increase disability management behaviours. And, while a direct effect on behaviours was found for disability management supports, it seems that these variables do not appear to interact with policies to influence behaviours. In fact, the non-significance of disability management experience as a direct effect on behaviours also may suggest that the respondent's given pattern of behaviours is reinforced and maintained rather than changed with exposure to more disability management situations.

The significance of the tenure interaction term is interesting in that it is a negative coefficient. It seems disability management behaviours are less likely when the organization emphasizes its policies and the employee has more years of service with that employer. It is possible that this result indicates that the longer term employee's view of the organization's emphasis on policies is jaded or tempered with negative past experience. Alternatively, it is also possible that newer employee is more sensitive to the policies of the organization, or more interested in appearing

to be following the policies, such that these employees go a bit more overboard when seeking to comply with the policies.

With respect to the identified interaction for Affective Management Climate with DM Policy, it appears that while a high climate has the strongest interaction with disability management policies, the frequency of disability management behaviours is the greatest in organizations with a low climate score. This result is difficult to understand and likely requires more research to understand why disability management behaviours would be performed more frequently in environments where the relationships between managers and employees are less positive. One potential explanation is that to the extent that poor climate is a proxy for a unionized workplace or a compliance-oriented work place, it may be that managers are more likely to know regulatory or legal requirements upon them for disability management issues and thus perform more behaviours. Another potential explanation is that in such an environment, employees may be viewed less as colleagues and more as resources. As such, managers may view performing disability management behaviours as methods of resource protection and thus be more willing to take the steps necessary to recover and retain the productivity of the employee. Alternatively, while it is easy to think that a manager with a higher quality personal or professional relationship with the employee is more likely to want to exhibit positive disability management behaviours, it may be that the collegial nature of the relationship inhibits the manager from actually performing those behaviours. Both of these explanations are speculation and require additional research to clarify further

As a final comment on the findings of the research, it is instructive to note that the regression models consistently explained part of the variance in the dependent variables, but never explained more than a third of the variance in the disability management outcomes. However, it reinforces the idea that while policies and behaviours are important parts of disability management outcomes, they are only part of the answer. Consequently, it remains important to both examine other organizational and managerial factors in effort to explain more variance, and to find points of integration for other models in disability management, such as the one developed by Stone & Colella (1996), to broaden the scope of our understanding of how disability management outcomes are achieved.

### **Limitations**

This study primarily tests for relationships between disability management policies, behaviours, and outcomes. There are several limitations in the data and methodology that need to be taken into account when considering its contributions and findings. I begin with study design, move to data collection and analytic strategy, and conclude with alternative explanations.

*Study Design.* Study design is the work plan for gathering the required evidence to effectively test the hypotheses (de Vaus, 2001). This study implemented a single cross-section study design, collecting observations from an established group at a single point in time. Although this design permits the development of a snapshot for the relationship between variables, it inherently prevents the determination of a causal arrow. This is because it focuses upon the differences between groups rather than the effects of change. Thus, in this study it is not

possible to determine the time sequence in which events occur. For example, I identified that behaviours are related to outcomes, but the assumption is that the behaviours came first, and in full. However, it is possible that managers' behaviours change in tenor throughout the reintegration and return to work process, perhaps in reciprocation to the perceived return to work efforts of the employee. A remedy for this limitation is a repeated cross-section design with data collection performed at more regular intervals during the rehabilitation and return to work period. Taking this approach may permit better detection of changes in behaviours and outcomes, as well the relative effects from introduction or removal of exogenous factors (e.g., changes in DM Supports).

*Data collection and analytic strategy.* Several limitations in the sampling method and nature of data are present in this study. First, the snowball sampling method enables me to find and engage survey participants that may have been difficult to locate otherwise. Starting the snowball sampling with reputable and large associations assisted the development of small but acceptable sample population. However, this approach has a considerable drawback: it removes some of my control over the sample population. Specifically, the sample may reflect a number of biases, including the recruitment of like-minded colleagues rather than sample population more reflective of the target population, or the localization of responses in a particular variable demographic (e.g., industry, respondent age) (Salganik & Heckathorn, 2004). As well, because of the snowball sample method it was not possible to follow-up with participants that were forwarded the surveys but did not complete them. I recommend that future studies both (a) construct a sampling frame

to identify a priori respondent strata to compare against the received data, and (b) include instructions on the covering letter requesting that the respondent forward the questionnaire to a range of colleagues.

The second, third, and fourth data collection limitations centre on the variables examined in the study. The second limitation is that several key variables were developed specifically for this study. While based on the expert opinions of disability management textbook authors and the experiences of disability management professionals, the items for the disability management policies and disability management behaviour variables did not undergo stringent validity and reliability analyses prior to inclusion in the study. Although inter-rater validity testing was performed with subject matter experts, and internal consistency measures were high for collected data, additional testing is required to affirm the items' discriminant and convergent validities (John & Benet-Martinez, 2000). Future studies should also examine the data for test-retest reliability and instrument biases.

The third limitation is reflected in the descriptive statistics result that some variables described in the extant literature had a low internal consistency (e.g., low Cronbach's alpha) in the collected data. For these variables construct validity is already established. Thus, this result suggests an issue in the presentation of items in the questionnaire. For both conscientiousness and climate, the number of measurement items was reduced to accommodate a shorter form of the questionnaire. Future research should give consideration to including the full number of construct measurement items given in the literature.



The fourth limitation is that respondents were asked to report on their own behaviours and perceptions of the disability management outcomes. This process may introduce response bias because of interests in presenting oneself and outcomes of ones actions in a positive light (social desirability bias). Common method variance is also an in issue in self-report surveys particularly those address attitudinal and behavioural issues (Lindell & Whitney, 2001). The concern is that relations between variables will be artificially inflated. Some authors suggest that this concern is overstated (Spector, 2006), and can be addressed effectively through survey sample design (Doty & Glick, 1998). While I cannot remedy this concern in my current study, following the advice of Lindell & Whitney (2001) I can recommend the following improvement to future research efforts. First, collecting data on some variables from the manager and some from a second party reduces the potential for response bias in the data. Second, collecting empirical data (e.g., number of grievances, days on leave) in addition to perceptual data (e.g., perceived effectiveness of the employee's reintegration) helps to enhance the rigor of the analyses. Third, including measures that are theoretically unrelated to the dependent variables and examining correlations between them can indicate the presence or magnitude of common method bias.

Lastly, the analytic strategy performed in the study also presents a set of limitations to the study's findings and contributions. First, linear regression models were used to test the hypotheses. This approach requires the assumption that a linear relationship exists between the variables. However, additional research is required to test for non-linear relationships (e.g., curvilinear) and critical point relationships for

the moderator variables. Second, more complex statistical methods (e.g., Structural Equation Modelling) can be used to test for multiple effect pathways and interactions between the analyzed variables. Implementing an analytical strategy to test different assumptions for the variable relationships with more complex analyses may result in a more full understanding of the data.

*Alternative explanations.* My findings are consistent with the social exchange theoretical premises outlined earlier in the chapter. These premises provide reasonable grounds for suggesting and exploring relationships between the variables. However, there are other possible explanations for my findings that were not fully addressed in the study. One of these is social capital theory (Bourdieu, 1986; Burt, 1997; Coleman, 1988), which suggests that individuals or groups develop levels of goodwill that influence social relations. One of the common understandings of social capital is that positive relations over time build 'credits' that influence the perception of obligations and expectations (Coleman, 1988).

In a disability management context, social capital may explain the performance of behaviours by managers. If the employee has a high level of social capital (e.g., well liked by colleagues, performs citizenship behaviours), the manager may be more inclined to extend extra efforts to help the employee return to work. In contrast, a manager may be disinclined to perform behaviours for an employee with low social capital.

It is useful to note that social capital is dynamic – even when earned it can be eroded (Granovetter, 1973). Subsequently, there may be an interaction between employees' level of social capital and the nature of their illness or injury that also

helps explain manager behaviours. That is, an employee with a generally high level of social capital, but with a chronic or unobservable condition (e.g. carpal tunnel syndrome, mental illness) may experience different managers behaviours than an employee with a more direct and treatable condition (e.g., broken arm). This is because the nature of the condition may cause the employee to commit or omit behaviours that subsequently impact their social capital and the willingness of managers to perform disability management behaviours. In light of this alternative explanation for the prediction of manager behaviours it is important to regard my research findings as informing to disability management practice but not as definitive answers,

The above discussion places some boundaries on the interpretation and generalization of the research conducted and described. This is a necessary and important step in fleshing out the context of the research and the environment in which the findings were discovered. The final section of this makes a few recommendations for how the findings of this research study can be built upon and improved. Taken together, the limitations and future research sections provide some suggestions for the continued advancement and development of the disability management field.

### **Future Research**

Through my research I draw attention to the benefits of disability management programs to organizations, explore contextual features that predict the presence of programs, and investigate the role of manager behaviours in creating favourable outcomes. This research is inline with calls for better understandings of

disability management programs in organizations. However, disability management is generally treated as a whole program with consistent application to all employees across the organization. Thus, while differences between programs or models (e.g., job matching approach, managed care model, direct case management model) are generally described in terms of overall methods in professional texts (for examples see Dyck, 2006), differences within programs and variances in the application to employees or employee groups are not. In essence, the literature examines the conduct and performance of disability management activities but does not attend to the purposeful choices in the composition or application of disability management policies in organizations. Thus, to better understand disability management in organizations from a strategic point of view I recommend consideration of these programs in terms of managerial purposes beyond the simple return of employees to work. Specifically, I set out two examples in how disability management programs may be considered and applied differently within organizations according to organizational intentions and preferences for disability management activities.

*Strategic Policy Intentions for Disability Management Programs.* Within a disability management program there are policies and procedures to direct manager behaviours. Some research has examined differences in the component parts of disability management programs between organizations in an industry (Westmorland et al, 2005). However, there remains little understanding about the overall intentions of various assemblies of disability management policies. It is reasonable to expect that organizations do not universally implement all possible policy provisions. Rather, it is more realistic to expect that as with other management programs

(Ichniowski & Shaw, 1995; Ichniowski, Shaw & Prensushi, 1997; MacDuffie, 1995) organizations assemble and implement disability management programs that serve the interests and needs of their business model. Consequently, within the general parameters of a given disability management model the form and function of disability management policies may be significantly different. These differences may then correspond to variations in work environments and contextual cues that explain different supervisor or employee experiences and disability management outcomes across organizations.

Earlier, I noted that some disability management policies have a relational orientation and some have a procedural orientation. For example, contacting employees soon after their first absence for an illness or injury is a relational activity, while reviewing job duties for potential accommodations is a procedural activity. An inclination to a procedural orientation means that the organization emphasizes the administrative or technical aspects of disability management, whereas a relational orientation emphasizes attending to the interactive or human side of the equation. Together, these views of policies clarify the intentions or expectations of an organization's disability management policies. In this chapter I produced evidence that manager behaviours are related to organizational emphasis on disability management policies. Managers can be generally expected to perform behaviours that are inline with the provisions of the organization's policies. Subsequently, the organization's emphasis on one type of policy orientation, or a balance of each, should be reflected in the disability management behaviours performed by managers.

Juxtaposing these two types of policies creates a framework against which organizations' intentions for disability management activities may be mapped (Figure 3.6). The bottom left corner of the framework is labelled as 'reluctant' and represents policies and procedures that have low procedural and low relational orientations. The intentions of such organizations may be to ignore disability issues with expectations that outside stakeholders will provide the expertise or resources required to help employees return to work.

The second quadrant is labelled as 'humanitarian', and reflects a shift upwards in attention paid to the needs and interests of the affected employee. Little attention is given to the procedural requirements of disability management programs, but managers are expected to build occupational bonds with the employee, seek to enhance the employee's job satisfaction, and reinforce the employee's perception of their value to the organization.

Policies and procedures in a 'progressive' system (Quadrant 3) represent the most open and proactive approach to managing the return of employees to work. This is the quadrant that many disability management practitioners and experts would point to as disability management best practice. The organization recognizes the human needs of the affected employee and also appreciates that there are many procedural requirements that need to be satisfied to effectively manage the employee's reintegration to work.

Lastly, organizations with policies and procedures located in the fourth quadrant of 'process negotiation' may value the involvement and input of various stakeholders, but also tend to focus upon the administrative rather than personal

aspects of disability management. This style of policies and procedures is likely more prevalent in organizations that are starting to understand the concepts of disability management but still tend to view an employee with injury or illness as a 'problem to resolve'. Examples of process negotiation policies and procedures include requirements to map-out a return-to-work process, schedule regular briefing meetings with key stakeholders, and reporting on absence costs incurred or saved.

Creating a matrix reflecting the ranges of emphasis on procedural and relational policies illustrates the variety of intentions that an organization may have for its disability management activities. With this approach it is easier to map differences in disability management programs across organizations, and understand why there are differences or similarities in outcomes experienced by managers and employees in those organizations.

*Application to Employee Groups.* Organizations do not always treat every employee equally. Lepak and Snell (1999 and 2002) describe a theoretical framework whereby the organization's assessment of employee value and uniqueness directly corresponds to modes of employment and configurations of human resource management programs. In their model, employees with high value and high uniqueness are privy to treatment that is different than that of employees with lower value or uniqueness. Similarly, an organization's application of disability management activities, or variations in those activities, may be a function of the organization's interests in disability management and perceptions of the employee's value to the organization. For example, a senior executive may receive more preferential treatment than an administrative clerk, but only if the organization is

attentive or interested in meeting the needs of its returning to work employees. A table of possible treatment differences is presented as Figure 3.7.

The potential for differential treatment in employee reintegration and return to work is exemplified in the internal workforce stability of an organization. Internal workforce stability refers to the degree to which organizations have a known and stable base of employees to conduct the business of the organization. An example of stability is the permanence of the employment relationship. Traditionally, permanent employees have an arrangement with organization to engage in ongoing work relationship with no expectation of separation in the short or medium term. In contrast, non-permanent employees are employed for shorter periods with an expectation that the working relationship will be terminated on a specified date. Seasonality is a good exemplar of non-permanence as it reflects swings in the employee-base due to anticipated production peaks or optimum organizational performance conditions (e.g., holiday sale periods).

It is reasonable to expect that the permanence of employment relationship has implications for the management of the workforce. Because non-permanent or seasonal employees are by definition more transient and less likely to return training and development investments to the organization, organizations with greater workforce seasonality and less permanence should be less inclined to have management practices that serve to build and maintain the productive capacities of their employees over the long term. By extension, organizations that are more stable in their employment offerings should be more interested in investing in programs to return employees to work.



Typically, the disability management literature espouses the universal value of every employee and encourages the presumption that organizations should strive to return every employee to the workplace. This approach is difficult to argue against on moral grounds. However, in the pure business environment, it is reasonable to expect that valuations of employees interact with organizational intentions around disability management to produce situations where some employees receive different return to work treatment than other employees. While not condoning differential treatment, appreciating the business context in which disability management occurs increases our understanding of how disability management is understood in organizations and applied by managers.

*Summary.* Disability management is an intentional effort by organizations to improve the outcomes of employee reintegration and return to work activities. Considering these activities as strategic efforts attending to specific organizational goals or purposes helps to expand our understanding of the form and function of disability management activities in organizations. The level of intention for procedural and relational activities by managers can explain differences in disability management outcomes experienced by managers and employees. The value or uniqueness of the individual employee combined with the interests of the organization in doing disability management well can explain why some employees receive treatment that is different from others. Admittedly, these strategic perspectives on disability require additional development and research. However, they do provide reasonable grounds for expanding the literature and understanding of

disability management in organizations from a human resource management perspective.

### **Implications**

As noted above, the central finding of the study is that manager behaviours are related to more effective employee returns to work. This finding has several clear implications for the disability management field. First, on a practical note, the tendency of organizations and managers to stand outside of the reintegration and return to work process needs to change. My own anecdotal observations are that many organizations are content to refer the injured or ill employee to health service provider and wait until the employee is 'healed' and ready to return to work. The findings presented here suggested that there can be a much more active and engaged role for organizations in disability management processes. And, while policies may be in place to direct that involvement, it remains necessary for the organization to provide encouragement to managers to enact the provisions of those policies.

There is little doubt that more active involvement of managers in disability management process is a difficult objective to achieve. Research shows that managers are frequently biased against employees with injuries and illnesses, and may even feel uncomfortable performing the behaviours that are necessary to really help the employee recover and return to work (Jones, 1997). However, organizational efforts to create consistent messages about the importance of rehabilitating employees and of being actively involved in the process is likely to result in better experiences and return to work outcomes for both employees and

their supervisors. Taking this approach does require an increase of effort for organizations where the disability management program is heavy in policy and light in manager accountability. The general finding is that manager behaviours are of significant importance to achieving outcomes, and in some cases more important than policies. Organizations must pay attention to the behaviours of its managers if it wants to influence and/or understand the outcomes it is observing. That is, while it is possible for organizations to achieve good outcomes when they 'talk the talk', it is of equal and sometimes more importance for managers to 'walk the walk'.

Second, organizational emphasis on policies seems to be a better predictor of behaviours than personal and organizational characteristics. This means, for example, that if an organization is attempting to affect change in its outcomes, it need not be overly concerned about the manager's level of experience or personality, aspects of the organization's culture, or the amount of support it gives to preparing the manager for their role. Implementing and emphasizing disability management policies appears to an efficient and sufficient approach for producing the behaviours that lead to better outcomes.

Third, through this research, the disability management research community has more clear grounds to extend social theories about the treatment of disabled persons into the workplace. At present, models and explanations of the treatment received by injured and ill employees generally talk about behaviours and decision making processes of managers based on the perceptions of the employee (Stone & Colella, 1996). While this study concentrated on the performance of disability management behaviours, it nonetheless represents a first look at the causes of these

behaviours that rest on more than assumptions of bureaucratic rationality or indifference to disability issues. In showing that managers exhibit a range of behaviours, and that these behaviours are influenced by personal and organizational contexts, I open the door to deeper enquiry on why managers respond differently to disability management issues.

Related, of interest also to disability management researchers is that the prediction of employee reintegration and return to work outcomes based on manager behaviours provides a common point for integrating existing predictive models of these outcomes based on the employee's perspective and unique contextual factors (see Stone & Colella, 1996). Pieced together, an integrated model would likely be more effective at predicting rehabilitation and return to work outcomes than either component alone.

## **Conclusion**

In this study I examined the relationships between organizational policies, manager behaviours, and outcomes. This is a difficult undertaking because disability management may be an infrequent situation for some managers, and in many cases engender a social acceptability bias. With data collected through a self-report web survey, I found that manager behaviours mediate the effects of policies on outcomes. I also found that certain personal and organizational characteristics moderate the relationship between policies and behaviours. These results indicate that manager behaviours are an important component of disability management processes and that disability management programs help to regulate manager behaviours.

**TABLE 3.1**  
**Types of Manager Behaviours in Disability Management**

<b>Behaviour Category</b>	<b>Examples</b>
Planning	<ul style="list-style-type: none"> <li>• Identify return to work options</li> <li>• Coordinate internal resources to support the employee's return to work</li> </ul>
Day to Day Management	<ul style="list-style-type: none"> <li>• Maintain work group productivity</li> <li>• Provide training and development opportunities</li> </ul>
Process Management	<ul style="list-style-type: none"> <li>• Monitor the employee's progress</li> <li>• Report outcomes to executive stakeholders</li> </ul>
Demonstrating Active Concern and Support	<ul style="list-style-type: none"> <li>• Make early contact with the employee</li> <li>• Assist the employee in regaining a sense of belonging and control</li> </ul>
Facilitating Participation and Involvement	<ul style="list-style-type: none"> <li>• Involve the employee in decision making</li> <li>• Share information and resources with external stakeholders</li> </ul>
Creating a Supportive Work Environment	<ul style="list-style-type: none"> <li>• Role model positive working relationships</li> <li>• Create a foundation of respect and teamwork</li> </ul>

**TABLE 3.2**  
**Factor Analysis of DM Outcomes Items**

<b>Items</b>	<b>Factor</b>
1. Almost all injured or ill workers rehabilitate and return to work	<b>.85</b>
2. Almost all injured or ill workers effectively reintegrate into their job	<b>.78</b>
3. There is good value for the money and time spent on employee rehabilitation and return to work	<b>.54</b>
4. Almost all injured or ill workers return to work faster than expected	<b>.63</b>
5. There are very few conflicts or disputes with injured workers about processes, expectations, or personal treatment	<b>.77</b>
6. Overall, I feel satisfied that I have done all that I can to help employee rehabilitate and return to work	<b>.64</b>

**TABLE 3.3**  
**Scale Items for DM Outcomes**

<b>Items</b>
1. Almost all injured or ill workers rehabilitate and return to work
2. Almost all injured or ill workers effectively reintegrate into their job
3. There is good value for the money and time spent on employee rehabilitation and return to work
4. Almost all injured or ill workers return to work faster than expected
5. There are very few conflicts or disputes with injured workers about processes, expectations, or personal treatment
6. Overall, I feel satisfied that I have done all that I can to help employee rehabilitate and return to work

**TABLE 3.4**  
**Factor Analysis of DM Behaviours Questionnaire Items**

<b>Items</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1. Document or track activities to ensure that nothing gets missed	<b>0.68</b>	0.01	0.37	0.38	0.02
2. Develop or plan alternative work options for the employee	<b>0.60</b>	0.10	0.36	0.34	0.04
3. Discuss or share information openly with stakeholders	-0.43	0.02	<b>0.53</b>	0.21	0.10
4. Wait for the employee to approach me with any issues or problems (R)	-0.10	<b>0.53</b>	-0.04	-0.08	0.39
5. Monitor the injured worker's progress through the entire return to work period	<b>0.63</b>	0.15	0.38	0.11	0.13
6. Make decisions at the last minute or on the fly (R)	-0.05	0.06	-0.06	<b>0.39</b>	0.21
7. Have clear and open communication with the employee	<b>0.86</b>	0.06	0.12	-0.29	-0.21
8. Make key rehabilitation and return to work decisions on my own (R)	0.25	-0.18	0.08	<b>0.45</b>	0.02
9. Build and maintain trust with the injured worker	<b>0.87</b>	-0.10	0.04	-0.29	0.18
10. Help the employee regain a sense of belonging and personal control	<b>0.80</b>	-0.13	0.10	-0.23	0.09
11. Report on rehabilitation and return to work processes outcomes	0.23	<b>0.58</b>	0.39	0.34	0.14
12. Seek input and involvement from all stakeholders	-0.56	0.67	<b>0.66</b>	0.18	0.04
13. Create an environment that is supportive and responsive to the injured worker's needs	<b>0.77</b>	0.02	-0.23	-0.04	0.07
14. Obtain approvals before coordinating or obtaining resources to support the employee (R)	0.22	<b>0.44</b>	-0.03	0.10	-0.20
15. Include the employee in decision making	<b>0.72</b>	0.08	-0.19	-0.02	0.04
16. Seek clear outlines of accountabilities for all stakeholders involved	<b>0.67</b>	0.00	-0.09	0.18	-0.27
17. Make extra efforts to educate stakeholders about rehabilitation and return to work processes	-0.20	0.01	<b>0.61</b>	0.39	-0.27
18. Conduct performance reviews of the employee	<b>0.44</b>	0.24	0.33	0.20	-0.21
19. Promptly find a replacement to 'fill-in' for the injured worker to minimize productivity costs in the organization (R)	-0.21	<b>0.90</b>	0.05	-0.16	-0.02
20. Empathize with the employee or their situation	<b>0.69</b>	-0.19	-0.02	-0.06	0.09



**TABLE 3.5**  
**Scale Items for DM Behaviours**

<b>Items</b>
1. Document or track activities to ensure that nothing gets missed
2. Develop or plan alternative work options for the employee
3. Monitor the injured worker's progress through the entire return to work period
4. Have clear and open communication with the employee
5. Build and maintain trust with the injured worker
6. Help the employee regain a sense of belonging and personal control
7. Create an environment that is supportive and responsive to the injured worker's needs
8. Include the employee in decision making
9. Seek clear outlines of accountabilities for all stakeholders involved
10. Conduct performance reviews of the employee
11. Empathize with the employee or their situation

**TABLE 3.6**  
**Factor Analysis of DM Policy Questionnaire Items**

<b>Items</b>	<b>1</b>	<b>2</b>	<b>3</b>
1. Express a lot of concern or support for the employee	<b>0.78</b>	0.37	0.40
2. Provide detailed information about policies and procedures	<b>0.41</b>	-0.01	0.13
3. Involve the employee in making key decisions	0.26	<b>0.66</b>	0.07
4. Follow only the rule and processes of the organization (R)	-0.17	0.12	<b>0.43</b>
5. Emphasize relationship building with employees	<b>0.62</b>	0.19	-0.27
6. Encourage the involvement of outside stakeholders	0.22	<b>0.42</b>	-0.05
7. Regularly evaluate the employees performance for capacity or training needs	<b>0.48</b>	-0.22	0.32
8. Making extra efforts to help the employee feel valued and included	<b>0.46</b>	0.19	0.40
9. Flexible and open to ideas from other stakeholders	0.31	<b>0.43</b>	-0.22
10. Monitor employee for problems coping or adjusting to the work	<b>0.56</b>	0.24	0.25
11. Policies and procedures for purchasing equipment are flexible with room for discretion	0.26	0.38	<b>0.82</b>
12. Emphasize a relationship-oriented management style	<b>0.80</b>	0.21	-0.57

**TABLE 3.7**  
**Scale Items for DM Policy**

<b>Items</b>
1. The organization's policies and procedures expect me to express a lot of concern or support for the employee.
2. The organization's policies and procedures expect me to provide detailed information about policies and procedures
3. The organization's policies and procedures emphasize relationship building with employees.
4. The organization's policies and procedures expect me to regularly evaluate the employee's performance for capacity or training needs.
5. The organization's policies and procedures emphasize making extra efforts to help the employee feel valued and included.
6. The organization's policies and procedures expect me to monitor employee for problems coping or adjusting to the work.
7. The organization's policies and procedures emphasize a relationship-oriented management style.

**TABLE 3.8**  
**Scale Items for Conscientiousness**

<b>Items</b>
1. When I make a commitment I can always be counted on to follow through.
2. Sometimes I'm not as dependable or reliable as I should be. (R)
3. I am a productive person who always gets the job done.

**TABLE 3.9**  
**Factor Analysis of DM Supports Questionnaire Items**

<b>Items</b>	<b>Factor</b>
1. Ensures that rehabilitation and return to work policies and procedures are understood by all supervisors, managers, and key players	<b>0.85</b>
2. Communicates rehabilitation and return to work goals to supervisors, managers, and key players	<b>0.87</b>
3. Strives for continuous improvement in rehabilitation and return to work processes	<b>0.84</b>
4. Evaluates supervisors, managers, and key players on their performance of rehabilitation and return to work processes	<b>0.72</b>
5. Educates (provides training) for supervisors, managers, and key players about disability issues and their own roles in the organization's rehabilitation and return to work processes	<b>0.86</b>
6. Lets supervisors, managers, and key players 'figure things out' for themselves (R).	<b>0.65</b>
7. Waits for a situation to arise before training supervisors, managers, and key players in rehabilitation and return to work policies and procedures (R).	<b>0.70</b>
8. Provides support and encouragement from executives and leaders	<b>0.77</b>

**TABLE 3.10**  
**Scale Items for DM Supports**

<b>Items</b>
1. Ensures that rehabilitation and return to work policies and procedures are understood by all supervisors, managers, and key players.
2. Communicates rehabilitation and return to work goals to supervisors, managers, and key players
3. Strives for continuous improvement in rehabilitation and return to work processes
4. Evaluates supervisors, managers, and key players on their performance of rehabilitation and return to work processes
5. Educates (provides training) for supervisors, managers, and key players about disability issues and their own roles in the organization's rehabilitation and return to work processes
6. Waits for a situation to arise before training supervisors, managers, and key players in rehabilitation and return to work policies and procedures (R).
7. Provides support and encouragement from executives and leaders.
8. Lets supervisors, managers, and key players 'figure things out' for themselves (R).

**TABLE 3.11**  
**Scale Items for Organizational Climate**

<b>Items</b>
<b>Interpersonal Milieu</b>
1. People don't really trust each other enough (R).
2. A friendly atmosphere prevails among people.
3. It's very hard to get to know people (R).
4. People tend to be cool and aloof toward each other (R).
<b>Affective Management</b>
1. We are encouraged to speak our minds, even if it means disagreeing with our supervisors.
2. Management makes an effort to talk with you about your career aspirations within the organization.
3. There is a lot of warmth in the relationships between management and workers.
4. The philosophy of our management emphasizes the human factor, how people feel, etc.

**TABLE 3.12**  
**Descriptive Statistics and Correlation Matrix**

	<b>Variable</b>	<b>Mean</b>	<b>SD</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>1</b>	DM Outcomes	4.37	1.59	(.73)			
<b>2</b>	DM Policy	4.83	1.03	.37**	(.81)		
<b>3</b>	DM Behaviours	3.73	0.82	.51**	.34**	(.93)	
<b>4</b>	Tenure	9.91	8.72	-.18	-.08	-.02	( - )
<b>5</b>	DM Experience	13.20	8.50	.13**	.14	.21*	.16*
<b>6</b>	Age	45.32	9.38	.11	.20	.16	.26*
<b>7</b>	Conscientiousness	3.93	.86	.25	.19	.15*	.19*
<b>8</b>	Interpersonal Climate	4.76	1.38	.27**	.55**	.15	-.26
<b>9</b>	Aff. Mgmt Climate	3.80	1.67	.24*	.68**	.09	-.17
<b>10</b>	DM Supports	4.50	1.55	.24*	.34**	.25**	-.23

	<b>Variable</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>5</b>	DM Experience	( - )					
<b>6</b>	Age	.44**	( - )				
<b>7</b>	Conscientiousness	.03*	.21**	(.71)			
<b>8</b>	Interpersonal Climate	.10	-.01*	-.13	(.82)		
<b>9</b>	Aff. Mgmt Climate	.06	-.03*	-.16	.79**	(.87)	
<b>10</b>	DM Supports	.14*	.06	.03	.55**	.57**	(.90)
<p>* <math>p &lt; .05</math> (2-tailed).  ** <math>p &lt; .01</math> (2-tailed).  Internal consistency reliability coefficients for scale variables appear on the diagonal in parentheses.</p>							



**TABLE 3.13**  
**Regressing Policy on Behaviours**

Predictor Variables	$R^2$	$\Delta R^2$	$F \Delta$	$p$ of $\Delta$	$b$	$p$
Step 1    DM Policy	.14	.14	5.35	.05	.21	.05

Note. N = 116.

The standardized regression coefficients were computed on Step 1.

**TABLE 3.14**  
**Regressing Behaviours on Outcomes**

Predictor Variable	$R^2$	$\Delta R^2$	$F \Delta$	$p$ of $\Delta$	$b$	$p$
Step 1    DM Behaviours	.26	.26	32.05	.01	.79	.00

Note. N = 116.

The standardized regression coefficients were computed on Step 1.

**TABLE 3.15**  
**Regressing Policy on Outcomes Mediated by Behaviours**

Predictor Variables		$R^2$	$\Delta R^2$	$F \Delta$	$b$	
					<u>Model 1</u>	<u>Model 2</u>
Step 1	DM Policy	.13	.13	16.54***	.57***	.33*
Step 2	DM Behaviours	.32	.19	20.57***	-	.63***

Note. N = 116. Standardized Coefficients

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

**TABLE 3.16**  
**Regressing Policy on Behaviours Moderated by Personal Characteristics**

Predictor Variables		$R^2$	$\Delta R^2$	$F \Delta$	$p$ of $\Delta$	$b$	$p$
Step 1	DM Policy	.14	.14	5.35	.05	.21	.05
Step 2	Tenure					-.04	.05
	Conscientiousness					.12	.05
	Age					-.01	ns
	DM Experience	.19	.05	3.90	.05	.14	ns
Step 3	Interaction Policy x Tenure					-.22	.05
	Interaction Policy x Conscientiousness					.03	ns
	Interaction Policy x Age					.06	ns
	Interaction Policy x DM Experience	.22	.03	2.97	ns	.01	ns

Note. N = 116.

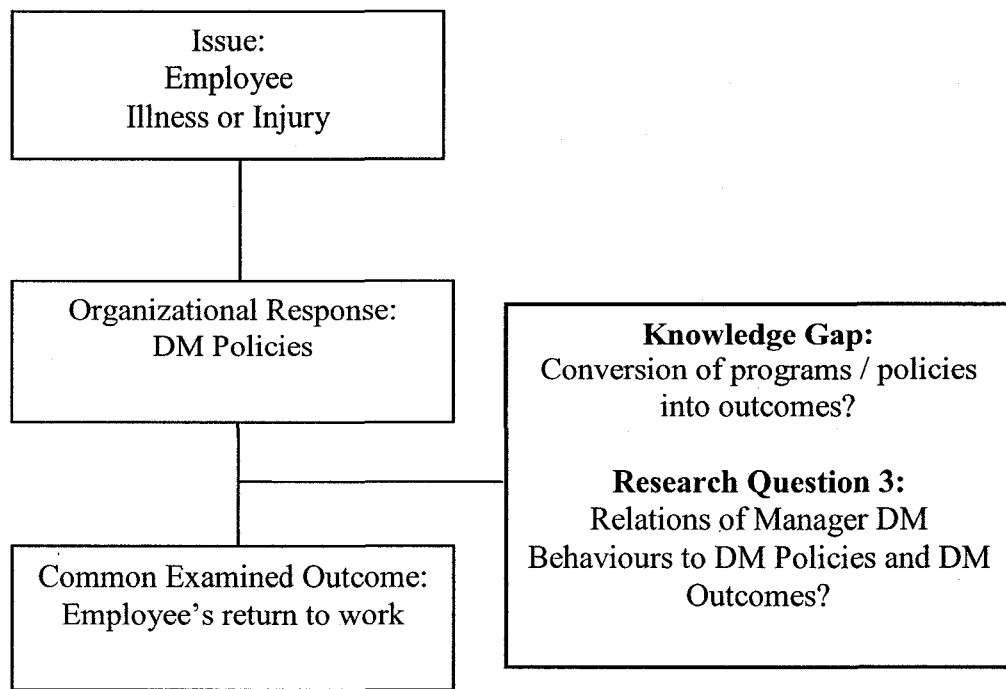
The standardized regression coefficients were computed on Step 4;  
 ns = non-significant ( $p > .05$ ).

**TABLE 3.17**  
**Regressing Policy on Behaviours Moderated by Organizational Characteristics**

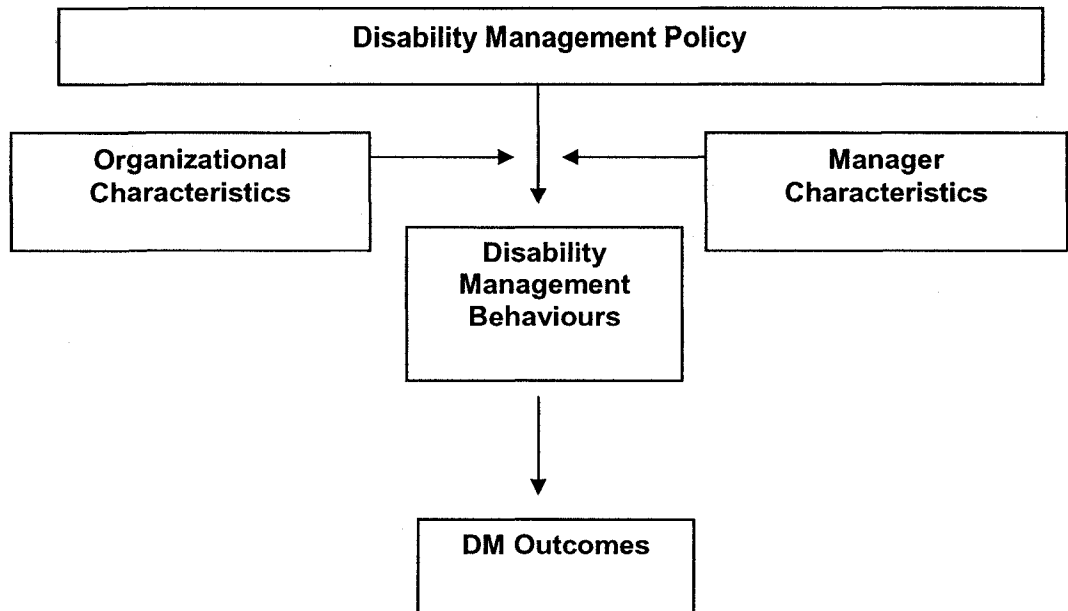
Predictor Variables		$R^2$	$\Delta R^2$	$F \Delta$	$p$ of $\Delta$	$b$	$p$
Step 1	DM Policy	.14	.14	5.35	.05	.21	.05
Step 2	DM Supports					.22	.05
	Interpersonal Milieu Climate					.13	ns
	Affective Management Climate	.23	.09	3.49	.05	-.51	.01
Step 3	Interaction Policy x DM Supports					.11	ns
	Interaction Policy x Interpersonal Milieu Climate					-.26	.ns
	Interaction Policy x Affective Management Climate	.27	.04	1.61	ns	.34	.05

Note. N = 116. The standardized regression coefficients were computed on Step 3; ns, non-significant ( $p > .05$ ).

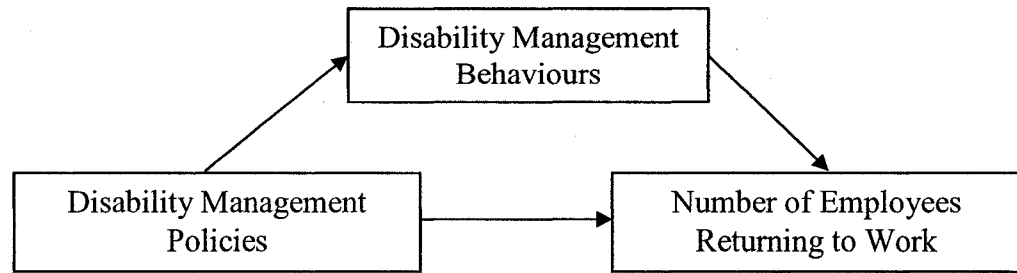
**FIGURE 3.1**  
**Knowledge Gaps and Research Questions**



**FIGURE 3.2**  
**Model of Relations Examined**

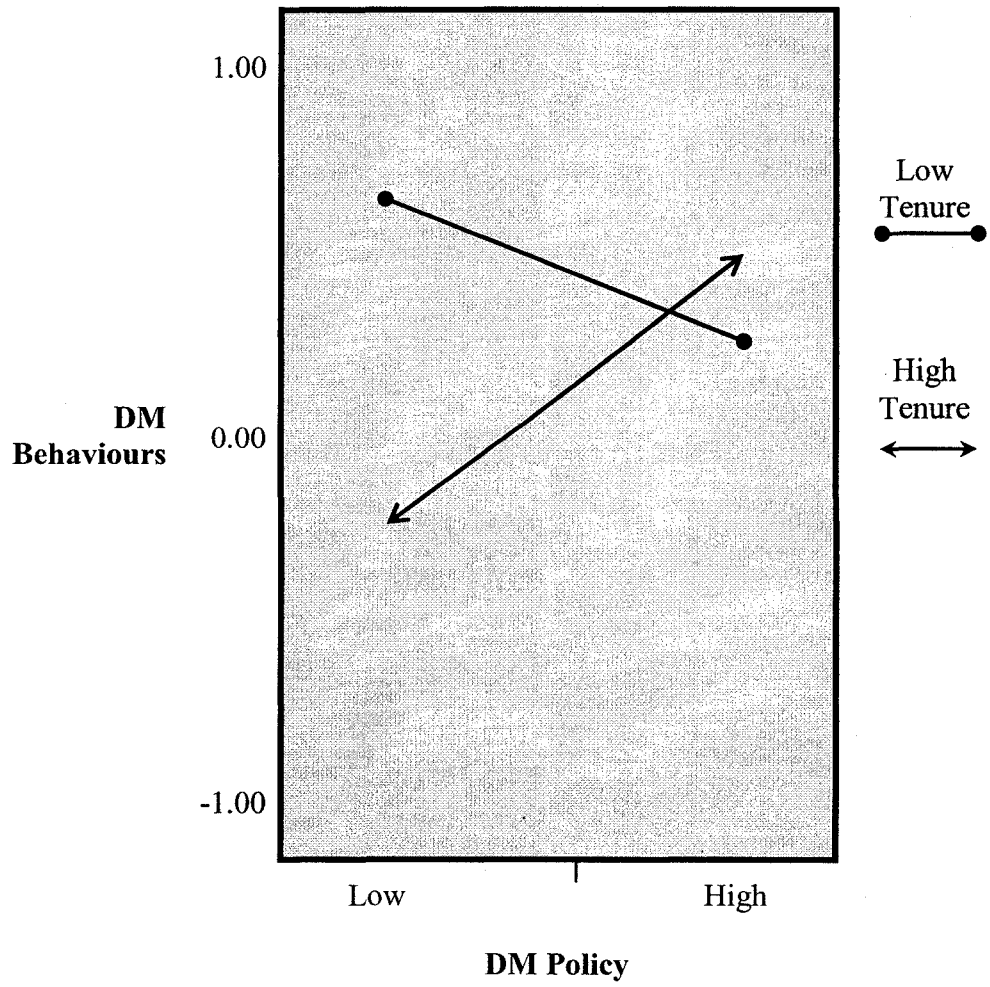


**FIGURE 3.3**  
**Policy – Outcome Relations Mediated by Manager Behaviours**

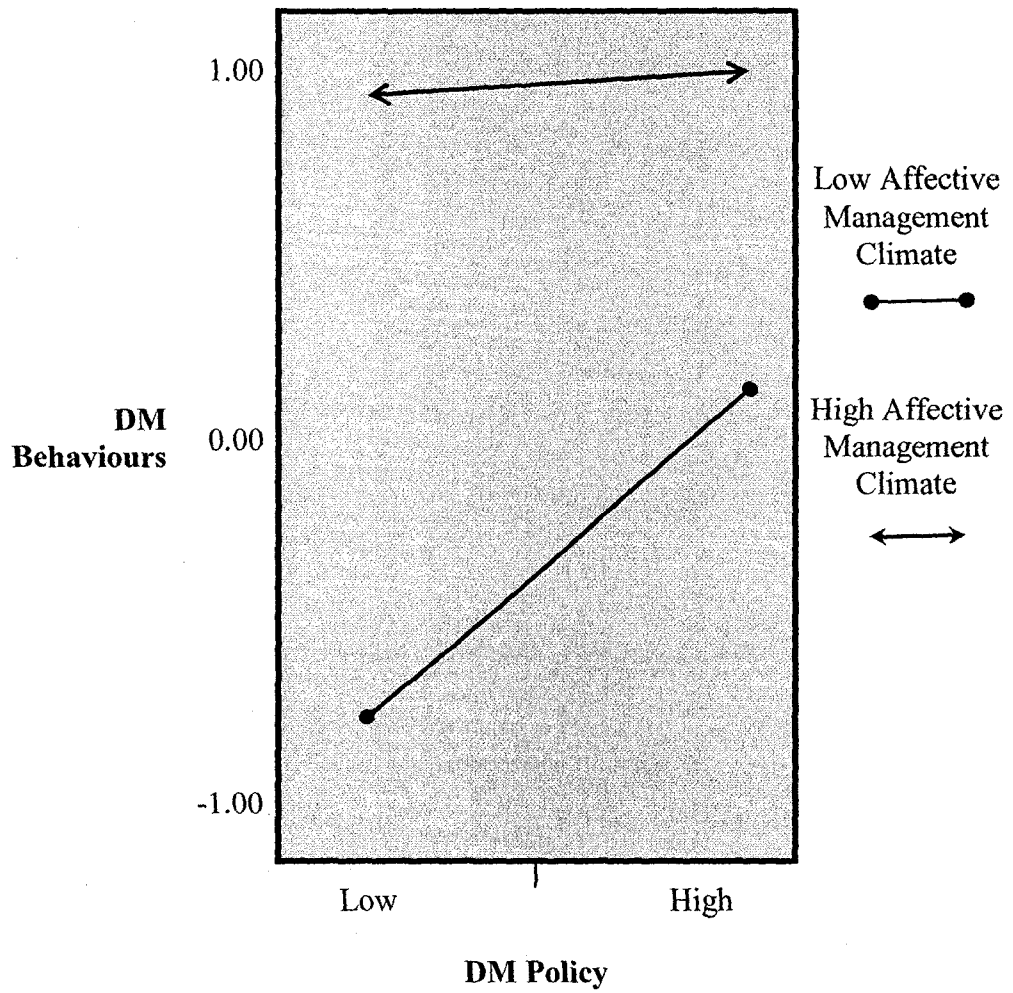




**FIGURE 3.4**  
**Interaction of DM Policy and Tenure on DM Behaviours**



**FIGURE 3.5**  
**Interaction of DM Policy and Affective Management Climate on DM Behaviours**



**FIGURE 3.6**  
**Strategic Intentions of Disability Management Policies**

<i>High</i> RELATIONAL	<b>Humanitarian</b> (Quadrant 2)	<b>Progressive</b> (Quadrant 3)
	<b>Reluctant</b> (Quadrant 1)	<b>Process Negotiation</b> (Quadrant 4)
<i>Low</i>	<i>Low</i> PROCEDURAL	<i>High</i>

**FIGURE 3.7**  
**Strategic Applications of Disability Management Programs**

<p><b>High Organizational Attention to Employee Return to Work Needs</b></p>	<p>Does not really care if the employee comes back, but wants to provide a good quality of care if they do return.</p>	<p>Really want the employee back and is ready to do what it takes to ensure that they are able to be effective / productive when they return.</p>
<p><b>Low Organizational Attention to Employee Return to Work Needs</b></p>	<p>Does not really care if the employee comes back, and seeks only to meet the basic expectations of the disability management program or related legislation.</p>	<p>Really want the employee back, but is heavily reliant on the medical / rehabilitative system to prepare the employee for their return.</p>
<p><b>Low Employee Value / Uniqueness</b></p>		<p><b>High Employee Value / Uniqueness</b></p>

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## CHAPTER 4

### INTRODUCTION

Disability is a significant employment issue. Discrimination against persons with disabilities is connected to reductions in national productivity capacity (World Health Organization, 1981), and poor management of employee injuries and illnesses needlessly increase operating costs of organizations (Boden, Biddle & Speiler, 2001). In Canada, one worker is injured on the worksite every nine seconds, and one worker in 15 is injured on the job each year (Human Resources and Social Development Canada, 2000). Further, a Wattson Wyatt Worldwide (1997) survey of Canadian employers indicates that in addition to insurance premium costs paid to Workers Compensation Boards, providing benefits coverage under short and long-term disability plans costs organizations an amount that is about equal to six per cent of payroll. The Government of Canada estimates that when indirect costs such as recruiting and training replacement workers, reduced productivity due to inexperienced workers, and overtime pay for other workers, the cost of employee accidents and illness to employers is approximately 9 billion dollars per year (Human Resources and Social Development Canada, 2000). Disability management programs – a systemic and organized response to employee disability issues, work to address these cost issues by increasing the employment of persons with disabilities through more effective reintegration and return to work practices (Akabas, Gates & Warren, 1996). With considerable stakes involved, it is clear that disability management is an important and increasingly critical subject for business operations and management research.

Employers frequently look to Workers Compensations Boards for support or direction in managing the costs of employee absences for illness and injuries. This is largely because when injuries happen at work, employers in most industries are required by law to report accidents to their provincial Workers Compensation Board (WCB, 2008). However, the role of the Workers Compensation Board is to assess the report and examine the employee to determine if compensation and / or rehabilitative services are required (WCB, 2008). It remains the responsibility of the employer to manage the employee's return to the workplace. Also, there is another large group that is off work because of illnesses or injuries that are not associated with the workplace. Generally, this cohort turns to corporate employee assistance programs for their return to work programming. For these reasons, it is important for organizations to take a proactive and self-directed role in managing employee returns and reintegration to work.

In spite of a wide offering of advocacy, promotion, and best-practice recommendations (see Social Development Canada, 2004) research shows that a minority of organizations have disability management programs in place (Marsh Risk Consulting, 2003). Further, when disability management programs are implemented, there is evidence that results vary across organizations (Habeck, Scully, VanTol & Hunt, 1998) and many participants in the process are disappointed with their experiences and outcomes (Friesen, Yassi & Cooper, 2001; Harlan & Robert, 1998). These findings indicate that there are disconnects between the literature and organizations on the utility and value of disability management programs, and how disability management programs are operationalized in situ.



There are many perspectives from which to examine the presence and operation of disability management programs in organizations. There are issues of legal or moral compulsion and compliance (Brannick & Brannick, 1992; Lee, 1996), financial and benefit administration (Curtis & Scott, 2003; Storrer, 2002), and organized labour and rights protection (Shrey, 1995; Williams, 2004). I approached disability management and the effective reintegration of employees with disabilities from the perspective of human resource management and strategic resolution of employment issues. I specifically focused on issues of relations between manager behaviours and disability management outcomes, and relations between disability management programs and peer programs, broad corporate strategies, organizational characteristics, and firm performance. The information gathered from this perspective supports the management of disability issues in the context of employer – employee relations. Overall, this approach provided perspective and tools on disability as a personnel and management issue, and thus one that organizations and supervisors have more qualification and ability to attend to.

### **SUMMARY OF FINDINGS**

My research examined three distinct gaps in the literature (Figures 4.1 and 4.2). These are: 1) contextual features that are related to presence of disability management programs in organizations, 2) firm-level outcomes that are related to disability management programs, and 3) the role of managers in creating favourable outcomes. Three studies were conducted. Two were presented in chapter 2 using the same general data but different variables. The third was presented in chapter 3. While attending to different research questions, and not triangulating onto a central

topic, they provide unique contributions along the employee return to work theme.

A summary of these studies follows.

## **Chapter 2**

This chapter examined organizational contexts and the role they play in giving rise, shape and purpose to disability management programs. From a strategic management perspective, disability management programs are an organizational choice about the value and importance of rehabilitating and returning employees to work when they become ill or injured. For some organizations, the business cost may be too great for perceived or returns on program investments, or the programs undesirable for strategic or other reasons.

The research questions in this chapter sought to better understand both how disability management programs fit within organizations, and if disability management programs related to firm performance. To investigate these issues I analyzed the data in the 2001 series of the Workplace and Employee Survey. Produced and managed by Statistics Canada, the survey provides data on management practices and organizational performance for firms across Canada. The sample size was reduced by removing smaller firms (i.e. less than 20) that are more likely to outsource disability management than develop in house programs, and striking cases with missing data for dependent variables. After these reductions and statistical weighting of the data, my research findings are representative of 78,263 organizations operating in a balance of industries and provinces across Canada.

Two types of disability management programs were examined. First, job accommodation programs that provide for changes to the equipment or processes in a

job so that an employee can better perform their duties were considered. Second, career growth programs that provide for increased job counselling or promotion support so that an employee can better progress in their career were examined. Several variables are drawn from the database and combined into scales to represent the inward or outward focused strategy directions of the organization's executive group, as well as the amount of high involvement work practices in use in the organization. Characteristics of the organization are drawn directly from the database (workplace size and age), computed (union density), and recoded (industry). Organizational performance is evaluated in terms of productivity per employee (revenue minus salary costs). Summaries of the findings of the research in this chapter are presented according to the two main questions asked in the chapter.

*What predicts the presence of disability management programs?* I found that less than half (43%) of the organizations in Canada with more than 20 people have a disability management program. I examined the relationship of disability management programs and various contextual features of organizations to determine if these programs were localized to particular organizational profiles. Specifically, I examined the presence of disability management programs in light of organizational characteristics, performance strategies, and management practices.

For organizational characteristics, I found that job accommodation and career growth disability management programs are positively predicted by union density. Also, that career growth programs were much more likely in service firms and less likely in manufacturing firms, and industry had no predictive effect for job accommodation programs. Workplace size and workplace age were not predictive of

either disability management program. These findings suggest that a stronger focus on employee rights (e.g., unionization) is linked to programs to help address injured and ill workers' needs. And, that a focus on interpersonal versus mechanical work tasks supports a proactive view of helping disabled workers progress in their career. The fact that union density provided the strongest and most clear predictive relationship to disability management programs is noteworthy. Further research is required to better understand the influence of unions in regard and if the result is a function of stronger employee voice and collective bargaining clout, or simply a correlate of collectivist values of Canadians. Distinguishing between employee voice and national values will aid future discussions of differences in disability management programs and outcomes across national boundaries.

For performance strategies, I found that an inward focus on operating excellence (e.g., improving performance measures, training and development) strongly predicted job accommodation programs and did not predict career growth programs. A firm's outward focus on external growth made the presence of a job accommodation program less likely and did not predict the presence of career growth programs. This finding suggests that firms seeking to maximize their operations also look to maximize their use of existing staff. These results present a case for understanding the vertical alignment of disability management programs as part of general corporate strategy.

For management practices, I found that high involvement work practices and welfare supports were strongly predictive of job accommodation programs and moderately predictive of career growth programs. When high involvement work

practices and each of the performance strategies are interacted I found that the combination with operating excellence did not predict either job accommodation or career growth programs. In contrast, the external growth combination moderately reduced the odds of a job accommodation program and significantly reduced the odds of a career growth program. What this means is that firms that strive to involve and engage their staff through progressive management practices also look to retain the individual strengths of employees.

Overall, these results provided support for a contingency perspective for the value or fit of disability management programs in organizations. More specifically, these results showed that while disability management is borne of a social need to prevent systemic discrimination, there remains an explanatory role for management strategy and organizational context in the implementation and application of these programs. For example, disability management programs are distinct from high involvement work practices and welfare supports but all three are positively correlated. This suggests that disability management programs reflect an organizational interest in the well-being of its employees, and that this interest is expressed through a horizontal alignment of similarly intentioned management practices.

*What is the relationship between disability management programs and firm performance?* A positive correlation was found between disability management programs and firm productivity. That is, firms with higher productivity are more likely to have implemented a disability management program. However, correlation allows for competing causal interpretations. For example, on the one hand, the

principles and practices of welfare capitalism are justification for the understanding that greater firm productivity influences the presence of programs. On the other hand, the resource-based view of the firm provides grounds for expecting that preservation of unique assets (i.e. people) relates to productivity and competitive advantage. I examined both alternatives and found that they both were statistically valid: the variables predict each other. However, these positions are not necessarily mutually exclusive. Both arguments rest on the case that organizations implement disability management programs to help look after their employees. They differ on the motivation of the organization in that regard. It is not possible with the present data to determine whether organizations implement disability management programs out of a sense of responsibility and support (welfare capitalism) or out of self-preservation and market advantage (resource-based view). Additional research is required to more clearly understand the strategic intents of organizations in implementing disability management programs.

My interpretation of causality in this situation was based on the work of Zatzick & Iverson (2006) and the resource-based view (Barney, 1991). Their research centred on high involvement work practices and productivity, and I proceeded with an analysis of disability management programs and productivity on the basis that there appears to be a horizontal alignment (or similar intention) between the two types of programs.

To test for predictive relations between disability management programs and productivity per employee I used linear regression models. After controlling for structural characteristics of the organizations, performance strategies, and

management practices, I found that job accommodation programs are positively related to productivity and career growth programs are negatively related to productivity.

I also examined interactions between disability management programs and other variables. I found that interactions of job accommodation programs with career growth strategies positively impacted productivity. Interactions of each type of disability management program with the performance strategies, management practices, and workplace size produce interesting findings. For both programs, workplace size interactions negatively impact productivity, operating excellence interactions negatively impact productivity, and external growth strategies positively impact productivity. High involvement practices interact with job accommodation programs to positively impact productivity, but interact with career growth programs to negatively impact productivity.

These results indicate that disability management programs contribute to an organization's ability to compete in the marketplace, but that the impact of these programs is moderated by other contextual features of the organization. For example, as organizations focus more on operating excellence the impact of disability management programs on productivity is reduced. To explain this result, stronger emphasis on internal effectiveness may be reflected in tighter coupling between work functions and greater standardization of tasks thus making the flexibility demands of job accommodations a barrier to efficient operations.

These findings have important implications for the marketing of disability management programs to organizations. Particularly, while saving on benefit costs

is a valuable message, many organizations also respond favourably to messages of increased profitability and revenue generation. Consequently, these results frame disability management as more than a cost saving measure and support a broader value or purpose of these programs to organizations. And, although this is not a strong business case for the implementation of disability management programs, it does show that these programs provide benefit to the organization that is additional to social responsibilities and cost savings. This is a finding that is novel to the disability management literature.

Overall, the findings to the three research questions provided considerable insight and new knowledge into contextual features of organizations that relate to the presence of disability management programs, and into the firm-level effects of these programs. This confirmed that a minority of firms implement disability management programs, but also observed that it is more common for organizations to implement job accommodation and career growth programs. Also, the likelihood of disability management programs in organizations is better understood as a contingency of performance strategies, management practices, and union density. And, disability management programs are linked to the productive capacity of the organization. Together, these findings significantly improve our understanding of the fit and function of disability management in organizations.

### **Chapter 3**

The role of managers as an important agent in employee returns to work is hinted at in the literature but rarely explored in depth. Yet, it is becoming clear that supportive and engaging behaviours by managers is desired by employees (Larsson



& Gard, 2003), and projected to have positive impacts on disability management outcomes (Cubero, 2007; Horstman, Buterbaugh & Tichnell, 2000). In this chapter I addressed this gap in understanding the role of manager behaviours in disability management. Specifically, relations between policies, behaviours, and outcomes were tested under the assumption that behaviours act as a moderator between policies and outcomes. To better understand the performance of disability management behaviours, I also took into consideration that manager behaviours are likely influenced not just by the policies themselves but also by personal characteristics (e.g., age, experience in disability management) and organizational characteristics (e.g., culture, provision of disability management training), and thus tested for these relations as well.

A web survey of more than one hundred managers across Canada provided the data for examination of the effects of manager behaviours in disability management. Many variables in the survey were drawn from the literature, but several new measures specific to the research were developed. The key variables in the study are disability management behaviours, policies, and outcomes, and each reflects the participants' self-report assessment of disability management in their organization. Disability management behaviours are measured as the frequency of that the manager performs various best-practice disability management activities. Disability management policies are measured as the organization's emphasis on various processes that shape disability management activities in the organization. Disability management outcomes are measured as the results of employees' returns

to work. Summaries of the findings of the research in this chapter are now presented according to the two research questions asked in the chapter.

*What is the relation between behaviours, policies, and outcomes?* Social exchange theories suggest that employees respond favourably to supportive and fair work environments. In some cases, employees respond by performing volitional behaviours that help to increase the effectiveness or function of the workplace (Peele, 2007). In other cases, employees respond to procedural and interactive fairness perceptions with greater levels of trust and stronger interpersonal relationships (Singhambler, De Cremer & Merken, 2006). Eisenberger, Huntington, Hutchison & Sowa (1986), and Leventhal (1976 and 1980) direct that the actions of managers influence employee perceptions of support and willingness to reciprocate goodwill.

In the context of disability management, performing disability management behaviours may help create a work environment that is more appealing to employees and thus increase the effectiveness of the employees return to work. This is because disability management is can be a difficult process requiring significant levels of trust and volitional behaviours from managers and employees to do effectively (Friesen, Yassi & Cooper, 2001). Consequently, it is reasonable to suggest that greater performance of procedurally and interactive fair disability management behaviours will result in to more effective returns to work.

To determine if there is a relation between manager behaviours and effective employee returns to work I used linear regression models to test for relations between policies, behaviours, and outcomes. The data shows that increased

frequency of disability management behaviours positively relates to an increase in disability management outcomes. This result indicates that efforts by managers to more actively manage or engage in disability management processes and create better return to work environments for employees is rewarded by better return to work outcomes.

The data also shows that the frequency of disability management behaviours mediates the influence of disability management policies on return to work outcomes. In themselves, disability management policies have some positive effect on employee return to work outcomes. However, return to work outcomes are better explained in a mediated policy-behaviour relationship than as direct effects of either policies or behaviours. This means that it is important for organizations to continue to have and promote disability management policies, but also to encourage managers to perform disability management behaviours.

To better understand the relationship between policies and manager behaviours I drew upon the findings of the above research and introduced variables for the personal characteristics of the managers, and the situational characteristics of the organization. These new variables were tested as moderators of the above confirmed policy-behaviour relationship.

Two variables produced significant interaction effects for policy-behaviour relations: tenure, and affective management climate. Tenure has a negative interaction with policies revealing that supervisors with more years of service in the organization are less likely to follow the behaviour expectations of the policies. This means that managers may reinterpret the policies in accordance to their observations

of disability management process in the organization. If the performance of disability management behaviours is important for the organization, this result indicates that the organization may need to take additional steps, such as enhanced training, monitoring, or performance measurement to ensure that longer tenured supervisors follow the provision of the policies.

An affective management climate (i.e. positive management-employee relations) also has a negative interaction term with policies indicating that supervisors are less likely to follow policy requirements in organizations where there are stronger relations between managers and their staff. Potential explanations for this result were presented in chapter's discussion section.

The findings for each these research questions are instructive about the role of managers in disability management and the performance of disability management behaviours. They reinforce the point that managers matter in disability management, and subsequently more attention can and should be given to their part in helping employees rehabilitate and return to work.

### **Summary**

In my research, disability management is approached from organizational and managerial perspectives. From this point of view, a number of important issues and knowledge gaps were identified and addressed in the previous chapters. For example, it is clear that disability management programs are not universal in their implementation in organizations. Features of organizations such as their performance strategies, management practices, and structures and operating contexts

appear to underlie the appropriateness or importance of bringing a disability management program into effect.

As well, there is evidence that disability management programs are more important to organizations than just serving as a localized effort to manage prolonged employee absences and save related costs. The positive relation of these programs to firm productivity provides support to understanding disability management programs as contributors to firm competitive advantage and ability to compete in the market place.

Lastly, it is evident that there is a strong and positive relationship between the performance of disability management behaviours by the supervisor and the achievement of many desirable outcomes. This is not to suggest that managers must be 'warm and fuzzy', as the described behaviours also include many process and administrative activities as well. It does suggest, however, that efforts taken by managers to behaviourally communicate key messages to the employee about the employee's value to the organization and the expectation for fair and reasonable treatment do pay re-integrative dividends.

To advance discussion of disability management in the human resources field, I attended to multiple research questions with exploratory research methods. As a result, I provided new and useful information about disability management in organizations and created new understandings of how disability management programs operate and produce value for organizations. Taken together, these chapters represent a significant step forward in the study of disability management. And, while my research does not fully fill the earlier noted gap in our understanding

of organizational contexts and processes in disability management, it is patently evident that I have responded to calls for increased theoretical attention to disability management in organizations.

### SYNTHESIS

In Western society, the organization is a fundamental place of exchange where individuals make contributions to the general public good and receive compensation or recognition for their efforts (Stienstra, 2002). In many cases, it is here, through corporate selection and management mechanisms that the determination of a person as a contributing member of society is made (Hahn, 1987). However, attention to organizations' roles and responsibilities in disability management processes (and thus helping people contribute to organizational and to societal needs through a worker role) only crystallized in the past decade (Thomason, Burton Jr, & Hyatt, 1998). Prior to that, external stakeholders like the medical community (particularly physicians and rehabilitation specialists), lawyers, insurance companies, and unions were seen as primary drivers and accountability holders of return to work processes and its subsequent manifestation, disability management (King, 1998). Organizations were simply the recipients of the 'fixed' employees.

From the employer's perspective, the costs of not employing persons with disabilities were not always appreciated or acknowledged. Historically, persons with disabilities were viewed as part of society's underclass: dirty, deviant, and requiring special care (Garland, 1995). In fact, the standardization and mechanization of industrialization and factory work in the 1900's discouraged the participation of persons with disabilities in the workplace – regardless of the disability's origin or

relation to work accidents (Harlan & Robert, 1998). At that time, employers used factual issues and social biases to separate those deemed 'capable' from those deemed 'incapable', and kept the incapable from employment (Acker, 1990). The economic transition from an agricultural to industrial base, plus the mass influx of workers to urban settings provided employers with significant discretion about the type of person they would employ (Harlan & Robert, 1995). This meant that firms had the freedom to employ only staff that could operate within the structured and rigid work processes of early manufacturing plants.

This short-sighted view of disability and disability management has begun to change. Although unions and employees have decried the lack of attention and fair response that organizations give to disability issues for some time, their words largely fell upon deaf ears (Mills, 1995). However, while legal and moral pressures may not have swayed organizations in the past, the present fiscal environment is catching organization's attention (Salkever, Shinogle & Purushothaman, 2000). Several examples illustrate the present operating context for organizations in relation to disability issues. First, persons with disabilities represent 12% of the Canadian population (Social Development Canada, 2004). This is a substantial consumer group, and some organizations recognize that employing persons with disabilities provides an access card (sales edge) to this market demographic (Riley, 2006). Second, the increased global mobility of labour and general tightening of labour markets means that attracting and retaining staff is of considerable and growing importance (Giddens, 2002; Pfeffer, 1997). Organizations recognize that employing persons with disabilities, especially helping existing employees recover and return to

work, is an important part of their talent management strategy and keeping their facilities productive (Harder & Scott, 2005; Thomason, Burton Jr, & Hyatt, 1998). Lastly, North America is shifting to a knowledge economy (Drucker, 1997 and 1999). This change to information and data work, rather than physical manoeuvring of resources means that activity-based working restrictions are less consequential and insufficient reason for excluding people from the workplace. Overall, organizations are beginning to understand the importance of helping existing employees with work limitations recover and return to the workplace and are finding it more advantageous to employ persons with disabilities (Hershenson, 2000).

Greater recognition of disability issues should translate into better outcomes for all involved. Evidence indicates that this not always the case: Employees still report bad experiences, and employers do not always get the return to work outcomes they are looking for (Florey & Harrison, 2000; Harlan & Robert, 1998; Rönmar, 2004; West & Cardy, 1997). To improve experiences and return to work outcomes, some researchers have looked to stakeholders external to the organization in order to improve return to work outcomes (e.g. medical and rehabilitative communities - Krause, Frank, Dasinger, Sullivan & Sinclair, 2001; and insurance and financial incentives - Salkever, Shinogle & Purushothaman, 2000). Certainly, these are important stakeholders and contributors to the process. However, it is my view that the central issue in poor return to work outcomes is not medical or financial, it is relational. That is, when the manager and employee have good relations characterized by open and free sharing of necessary information, foundational elements of trust, and appreciation of the person not the function, then the



complexities of disability management are reduced and the ability to create win-win solutions is increased. Thus, my research looks internal to organizations and examines the work environment, as suggested by the presence of disability management programs and nature of policies, and relations between managers and employees, as supported by managerial behaviours.

### **Moving Forward in Disability Management**

The findings of my research are detailed in earlier chapters and summarized above. Reviewing the entirety of the work, two fundamental issues in the relational aspect of disability management in organizations become apparent. Firstly, it is important that the organization has a disability-friendly work environment. Secondly, it is important for managers to build high quality relations with staff from the onset of employment and maintain those relations through disability management processes. In the following pages I provide recommendations for addressing these issues.

The first issue is the need for organizations to have a disability-friendly work environment. Such an environment is likely to help employees to feel that they are supported and cared for by the organization (Eisenberger, Huntington, Hutchison, & Sowa, 1986). While the technical insertion of employees back into the workplace can be achieved with simple job accommodations, the reintegration of the employee into the fabric of the workgroup is much more difficult. Not unlike new employee orientation or on-boarding (Allen, 2006; Fisher, 1986), it is my assertion that the full reintegration requires the development of personal and professional networks, collegial bonding, and general acceptance at the workplace. Otherwise, the

reintegration will only be superficial and prone to recidivism or other undesirable outcomes.

For all organizations, there are several steps or measures that should be taken to improve the nature of the work environment. The first step is to implement a disability management program to provide a framework and purpose to reintegration and return to work activities. This is an important step as it provides for clear provisions for employee returns to work before the issues become personified and personalized in a particular case. Through my research, I found that union density was a significant predictor of disability management programs in organizations, and subsequently expect that disability management program language is already built into many collective agreements. For organizations without a union a compelling business case for disability management programs can be constructed and programs implemented following the guidance of experts like Dyck (2006) and Harder and Scott (2005).

The sheer presence of a program, however, is insufficient. The programs must be integrated into strategic and standard business operations. This means monitoring corporate communications for disability friendly language, reviewing hiring and promotion practices for discrimination issues, providing appropriate training to supervisors and staff, and holding supervisors accountable for their return to work outcomes (Gates, 2000; Matt & Butterfield, 2006; Storrer, 2002). It also means that general perceptions of return to work issues will need to change from 'accommodating disability' to 'managing for ability'. In fact, virtually all persons have some form of limitation (Social Development Canada, 2004; Steinstra 2002);

thus the role of the supervisor is to find ways to help the employee access their abilities and produce value for the organization. Consequently, developing a program and integrating it into business operations helps to create a work environment that has clear provisions for supporting employees returning to work and is removed of negative bias towards employees with disabilities.

In unionized environments, joint union-management committees should also be used to further enhance a disability-friendly work environment. The recommendation to create these committees is not new, and the functions of these committees are generally well-established: create the programs objective and mission, manage dispute resolution mechanisms, and oversee the management of the program (Gallina, 2006; Harder & Scott, 2005). However, missing from these descriptions are role statements for encouraging a disability friendly attitudes in the managers and employees that they represent. My urging is for these committees to attend to the more complex issues of relationships and deeper issues than functional return to work issues and selling solutions to their members (e.g., balancing seniority rights with job accommodation requirements). The biases of managers in disability management are well documented (Stone & Collella, 1996) and need to be attended to. However, some employees also resist the return to work or job accommodation of their peers because of fears that they will be asked to unreasonably pick up the slack (LeBlanc, 2006) or concerns that job accommodations are not fair (Colella, 2001; Colella, Paetzold, & Belliveau, 2004). Consequently, because of their influence with their respective members, joint union-management committees can

have an important and integral in creating a work environment that is more open and conducive to employee reintegration and return to work.

The second issue is for managers to build high quality relations with staff, preferably before an illness or injury but certainly during the employee's recovery and return to work. Through my research, I found that managers who exhibited behaviours that would normally help employees feel the support of the organization or feel fairness in the return to work process reported better return to work outcomes. This finding is consistent with general applications of organizational justice theories to management issues (Greenberg, 1987). However, there are many reasons why managers may not exhibit supportive or fair behaviours. For example, there may be personal biases against persons with disabilities (Jones, 1997), or there may be operational concerns about making job accommodations (Florey & Harrison, 2000). These reasons illustrate the need for disability management programs to set parameters for manager behaviours and to influence the enactment of policy provisions. Bowen and Ostroff (2000) report that policies that are strongly and clearly communicated to employees results in behaviours in alignment with those policies. I found a similar result in my research – that there is an alignment between emphasis on policies and performance of behaviours.

However, policies for disability management alone are not sufficient to ensure good relation-based disability management. Although through the policies the managers have the motivation, they may still lack the ability and the tools. The aforementioned tendency of organizations to allow the external stakeholders to drive the employee's return to work may leave the manager feeling impotent and unsure of

how to engage productively in the process, or feeling little responsibility for the employee's transition to work. Subsequently, I urge organizations to be more proactive, and managers in particular, to more effectively prepare for their role in helping employees return to the workplace. For example, when asking about the disability management supports managers receive from their organization, the most highly provided supports were 'communicating the goals of the disability management program' and 'ensuring that the policies are understood by managers'. However, the least provided supports were 'training and development on disability management activities', 'evaluating performance on disability management activities', and 'receiving support and encouragement from senior leaders'. Consequently, as encouraging as the results are for the influence of policies and disability management supports on manager behaviours, much of the support provided were 'words' not 'tools' (methods, practice, or refinement in implementing and delivering disability management). I did not ask, but expect that health literacy programs (understanding illness and injury) are also an underprovided support to managers. It is my assertion that when policies (expectations) are combined with training (tools) in support of high quality relations during employee return to work situations that desirable outcomes will be more prevalent.

### **Final Thoughts**

For disability management to proceed we must look for solutions that are beneficial to all parties involved. In the employment context there are two key parties: employer and employee, each of which may be understood in macro terms (organization and union) and in micro terms (manager and employee). Prior work in

the disability management field has focused primarily on the macro party aspects of return to work. For example, putting programs in place, managing union relations, collective bargaining language and rights arbitration. Now, greater attention and effort is required on the micro aspects of return to work, particularly the relations and interactions between managers and employees in the work unit. Truly, this is where the 'rubber meets the road' and traction on issues of discrimination and bias against persons with disabilities is gained. At the broad policy level it is unlikely that procedural distinctions are made for mental illness versus physical injury, and chronic versus acute. However, at the work unit level, managers may react to the type of disability very differently. For example, a physical injury like a broken arm can be observed and has a more clear start and finish recovery period than a mental condition such as stress which may have impacted the employee's work for a long period of time before reaching a spill over point. Consequently, the manager's understanding of the disability and their willingness to accommodate the needs of the employee may be strongly influenced by relationship they have with the employee.

In drawing down to the micro level, however, it is important not to lose sight of the contextual parameters that shape the employer and employee relationship. In my research, I account for features like union density, workplace size, workplace age, industry, performance strategy, peer management practices, and culture. These are factors that directly relate to the organization and its operations. I have also suggested that future research should include broader contextual factors such as legislation / public policy and industry patterns. Accounting for and describing these contexts increase our understanding of parameters within which the research

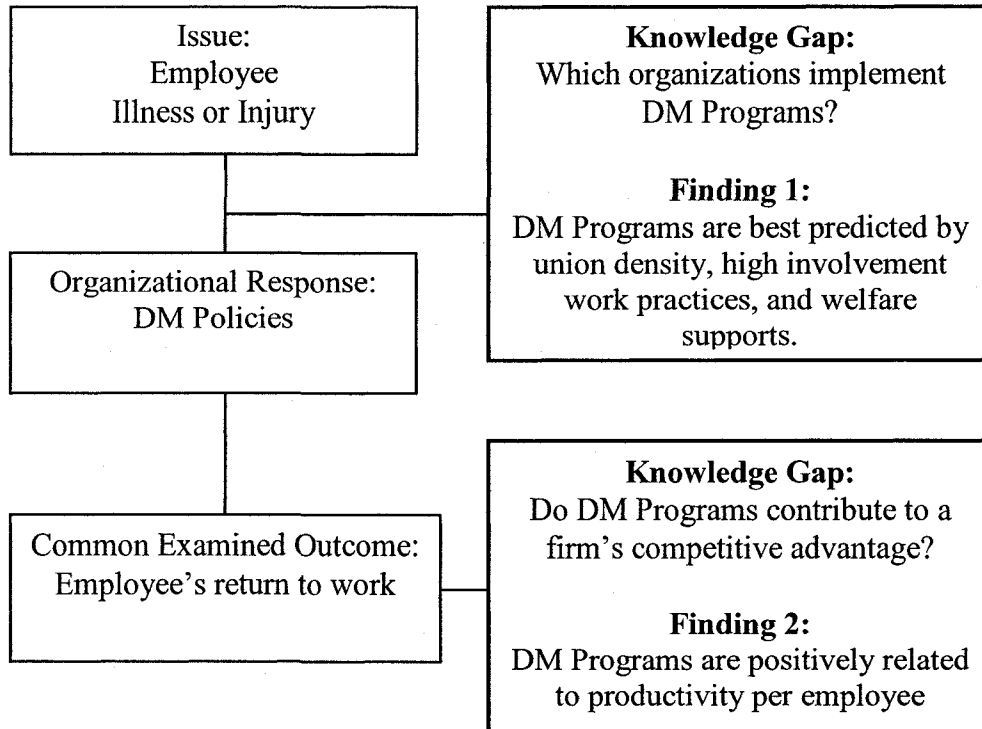
findings were produced, and the generalizability of the results (Johns, 2006). These parameters are often not well described in the disability management literature (nor in the general human resource literature) and it is generally assumed that findings translate equally well across organizations, and across national boundaries. There is presently nothing in the literature to formally contradict this assumption, but it may become problematic and corrected in the future. Much of the disability management literature is produced in the United States of America, but there is also an increasing recognition that there are national differences in how disability issues are approach and managed based on variations in social policy, legislation, and economic conditions (Dyck, 2006; National Institute of Disability Management and Research, 2003; Shrey & Hursh, 1999). Consequently, while my findings appear to be inline and consistent with related research, future research should more carefully consider the impact of national context on the organization's role in managing employee issues, including disability issues.

The findings of my research are timely and highly relevant to Canadian employers, particularly those operating in Alberta. Present economic and labour market conditions are driving employers to access untapped or neglected pools of workers such as aboriginals, the elderly, and the disabled (Social Development Canada, 2004 and 2005). I show that approaching employee return to work as a management issue, and not necessarily a disability issue, leads to insight and understanding that is beneficial to the operations of the organization. Said more directly, by revealing that disability management is a relevant strategic and interpersonal management topic I help to create firmer ground upon which

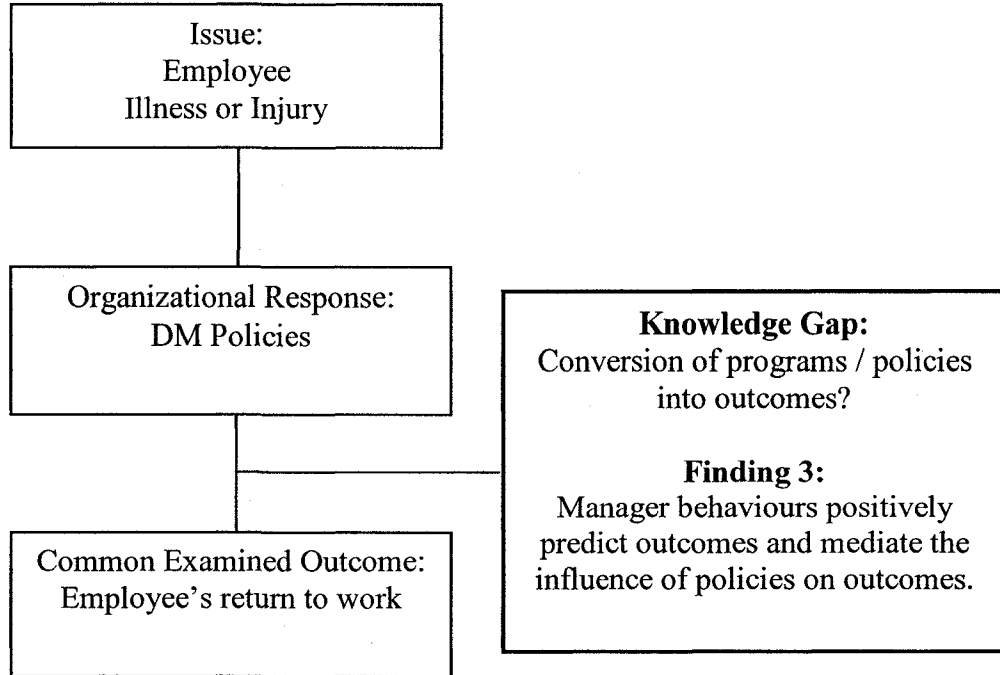
organizations can engage and act on disability issues. In my view, an organization's approach to disability management is as fundamentally important to its operations and success as is performance management, succession management, or any other management program given serious attention and resources, as they all address the same concerns of effectively managing the workforce. Consequently, in addition to contributing valuable information towards achieving positive disability management outcomes, I have helped to more strongly situate disability management as an organizational responsibility, a managerial accountability, and by extension an application of the human resource management function. The net result of these contributions is that supervisors and employees can more clearly and purposefully look to human resources as an internal source for consultation on disability and employee return to work as a management issue.



**FIGURE 4.1**  
**Knowledge Gaps and Research Findings**



**FIGURE 4.2**  
**Knowledge Gaps and Research Findings**



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