Prevalence and Predictors of Disability Management Programs

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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. However, formal programs are not universal - they are present in a minority of organizations. This article examines the relationship between a formal diversity management program and both organizational characteristics, and business conditions, to explain the operating contexts in which diversity management programs emerge. To answer the research questions, data from Statistica Canada's Workplace Employee Survey was analyzed. Findings include evidence of positive relationships for union density, operating excellence business strategy, and high involvement work practices. Negative relationships were identified for manufacturing firms, and external growth business strategy. This study provides grounding for further research on several topics, including Union-Management Collaboration, Industry Interconnectedness, and Legislation and Public Policy.

Keywords: disability management, return to work, business strategy

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, studies show that program implementation rates are stable at only about 30-40% of organizations (Marsh Risk Consulting, 2003; Shoemaker, Robin & Robin, 1992). Subsequently, it is apparent that we need to know more about the decision context in which organizations choose to implement disability management programs (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 study contributes to that discussion by presenting a large-scale examination of disability management programs in Canadian organizations.

The research question in this study is: 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, 1999) 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.

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 question asked in this study enquires into an area of disability management that is relatively unexplored. The 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.

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.

The *Industry* of an organization "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; 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 interested 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 labor market make some practices more desirable at certain times (e.g., retention programs in a tight labor 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 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 (Sheppeck & 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. 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 behavioral 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 defense 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 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).

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.

The Workplace Employee Survey (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 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 is based on data from the 2006 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, Hidiroglou & Lavalle, 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.

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 2006, 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 provided below.

Disability Management Programs

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 (Budkiewicz, 1998; McMahon, 1999; Salkever, Shinogle & Purushothaman, 2000; Schwartz, Watson, Galvin & Lipoff, 1989; Shrey & Hursh, 1999), 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 ask 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.

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 labor 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 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 labor costs (.51). This approach

to developing strategy variables is similar to other authors using the WES (Thornhill, White and Raynor, 2005).

TABLE 1
FIRM STRATEGY FACTOR SCORES

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

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

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 (chronbach 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) with a Cronbach alpha scale reliability coefficient of .81.

TABLE 2
WELFARE SUPPORTS FACTOR SCORES

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

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

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 3).

TABLE 3
MANAGEMENT PROGRAMS AND PRACTICES FACTOR SCORES

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

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).

RESULTS

In this section are the results of the empirical analyses that assess the relationships discussed earlier. It begins 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 is presented in Table 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.

TABLE 4
FREQUENCY OF DM PROGRAMS

		DM Programs (Job Accommodations)	
		No	**Yes**
DM Programs (Job Accommodations)	**No**	44,610 (57%)	6,249 (8%)
	Yes	2,598 (3%)	27,806 (35%)

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

Means, standard deviations, and correlations among the study variables are presented in Table 5, including the relationships between disability management programs and each of variables for firm strategies, management programs and practices, and organizational characteristics. These relationships provide 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.

TABLE 5
DESCRIPTIVE STATISTICS AND CORRELATIONS

	Variable	Mean	SD	1	2	3	4
1	DM Programs	0.43	0.18				
2	(Job Accommodations)	0.39	0.11	.41**			
3	(Career Growth)	337	108	.12**	0.17**		
4	Operating Excellence Strategy	3.21	0.82	.06**	-.09**	.03**	
5	External Growth Strategy	3.17	0.82	-.17**	.08**	.06**	.32**
6	High Involvement Work Practices	1.56	1.48	.39**	0.21	.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	0.12	0.29	-.08**	-.04**	.14**	.13**
10	Industry	0.67	0.43	.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	-0.00	-.01**	.22**	.22**		
10	Industry	.14**	-0.00	-.16**	-.13**	.06**	
11	Workplace Age	.21**	-.09**	.03**	.06**	.31**	-.06**

[a] 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).

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 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 = .0.5) 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 for the implementation of disability management programs.

TABLE 6
RESULTS OF LOGISTICAL REGRESSION ANALYSIS FOR DISABILITY MANAGEMENT PROGRAMS

Variables	**DM Programs (Job Accommodations)**			
	B	**Wald**	**-2 Log Likelihood**	**Exp (B)**
Model 1: OrganizationaI 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	0.98
Model 2: Performance Strategy	Cox — Snell Likelihood: .05			
Operating Excellence Strategy	.92	.02	944.55	2.51
External Growth Strategy	-0.55	.02	1040.84	.58
Model 3: Management Practices	Cox — Snell Likelihood: .03			
High Involvement Work Practices	0.87	.01	600.51	2.39
Model 4: Non-Wage Benefits	Cox — Snell Likelihood: .04			
Welfare Supports	0.53	.02	329.57	1.44

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 predict 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.

Summary

In this section I explored answers to the research question posed earlier. The pattern of results seems to suggest that there are several important relationships between the presence of disability management programs and contextual features of the organization. These findings reveal that disability management programs are more common in organizations that have higher levels of unionization and more high involvement work practices.

DISCUSSION

This study 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 and determine if there are relationships between contextual features of organizations and the presence of programs. In this section I examine these results further and sort out some of the meanings and implications of these findings. I also examine 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 question. 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.

Review of Findings

The question, what predicts the presence of disability management programs? 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 clearer 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 clearest 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 labor markets are tight.

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.

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.

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 study 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.

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. One 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. 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 labor market issues are initiating a revisiting of standard approaches. For example, shortages in the labor market are forcing organizations to re-examine the availability of staff from non-traditional labor 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 behavior 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; Rönnmar, 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.

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