

IMPROVING WORKPLACE ACCOMMODATION FOR THE ELDERLY AND DISABLED



IMPROVING RETURN TO WORK OUTCOMES RESEARCH

Dr. Vicki Kristman is interested in improving return to work research. Her program of research focusses on supervisors and the provision of workplace accommodations. The paragraphs below describe her current and completed projects that address her return to work research goals.

CIHR New Investigator Award – Preventing Work Disability through Accommodation

Disability is a crucial problem for society: it excludes individuals from full participation in society, education, and employment, and increases their dependency on social security and care. Persons with disabilities have lower participation rates in the labour force than those without. Work is important: good work keeps you healthy, good health keeps you working. Since older adults are choosing (and often need) to remain in the workforce, the problem of work disability is expected to increase dramatically. Older workers with more potential for health-related issues will present new challenges for preventing work disability.

Dr. Kristman's program of research proposes to target the prevention of work disability through accommodation. Accommodation is defined as modifications to work and work environments designed to enable participation in work. These include both formal and informal accommodations and adaptations at various stakeholder levels (workers, workplaces, organizations, sectors, policy, educational institutions, the health care system, etc.). Accommodated work has been shown to be an effective means of preventing work disability for workers with low back pain in the US. My program of research and will expand on accommodation as a means for decreasing

work disability due to other chronic illnesses beyond low back pain, especially for those chronic illnesses highly prevalent in older age.

The overall objective of the proposed program of research is to prevent work disability through the provision of work accommodation. The research program will answer three specific research questions:

- 1.) How can stakeholders identify or develop accommodations for workers trying to return to the labour force?**
- 2.) How can workplaces and employers support the implementation and application of workplace accommodations?**
- 3.) How do we measure and demonstrate the health and economic impacts of workplace accommodation for all stakeholders (i.e., workers, employment-seekers and their families, employers, governments, insurers, unions and associations, etc.)?**

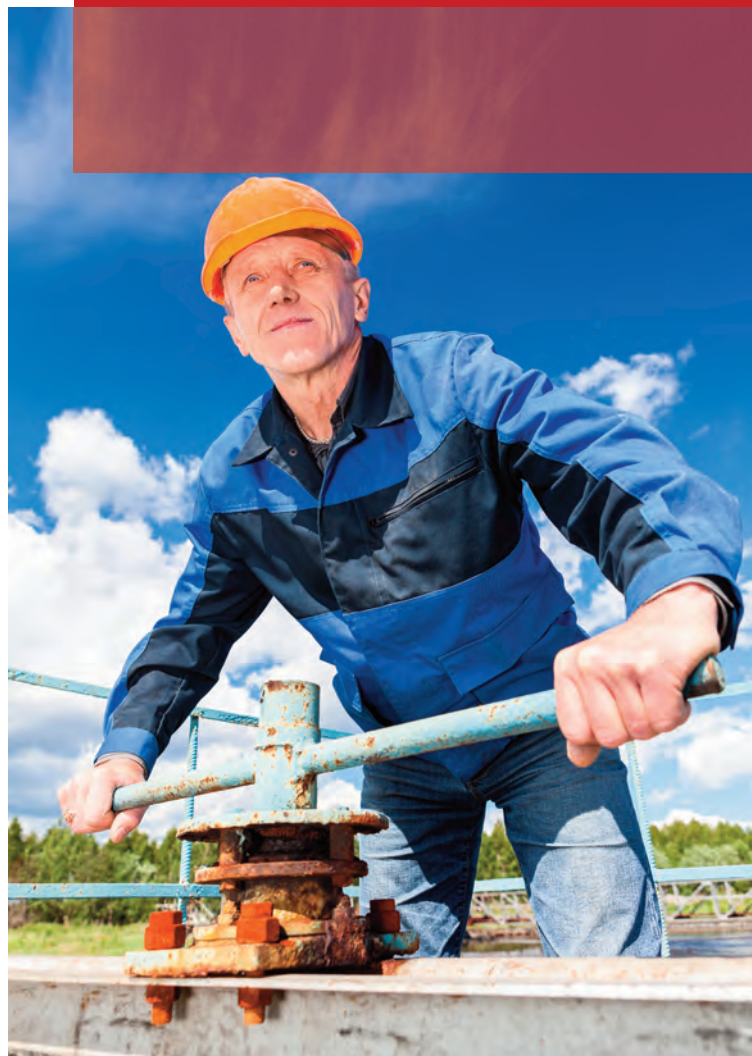
Work disability prevention is a transdisciplinary problem and hence, requires a transdisciplinary approach. Dr. Kristman's background training has provided her with strong methodological and analytical skills in epidemiology. Therefore, her approach is epidemiological in nature, but

is also very collaborative, as to utilize the skills of individuals from many disciplines. These varying perspectives will increase understanding of the issues, enhance the depth of the research, and improve knowledge translation to stakeholders.

The research program will develop strong evidence and approaches that support interventions and policies focused on accommodation and enabling healthy work. This evidence will lead to improved workplace accommodation and decreased work disability, potentially saving billions of dollars in direct and indirect costs associated with work disability. Beyond just cost savings, more importantly the health of the working population will improve. Good work keeps you healthy, good health keeps you working. Research from the past 30 years provides undeniable evidence that work and health benefit each other.

CIHR funded Supervisor training Randomized Controlled Trial

Supervisors of injured workers play a key role in preventing prolonged work absences. Providing supervisors with tools to improve their response to musculoskeletal and other workplace injuries may improve worker health and disability outcomes. The purpose of this current ongoing study is to determine if a supervisor training program can improve work disability outcomes for injured workers. The project involves employers in Canada and the US. Work units within participating companies are randomized to either receive the training or not. All supervisors within those work units randomized to receive the training are given 2 two-hour sessions of supervisor training. The goals of the training program consist of increasing opportunity for problem solving to reduce injury rates, improving supervisor response to prevent or decrease work disability,



and improving communication between supervisors, employees and health care providers. Worker outcomes, to be determined from workplace records, include number of lost-time injuries, duration of lost-time injuries in days, and number of days of sick leave. Results from this study will provide a strong conceptual basis for the inclusion of supervisor training in the implementation of future workplace intervention trials.

Dr. Kristman is seeking corporate partners for this project. If you are interested in learning more, please contact: Dr. Kristman at 1-(807) 343-8961 or vkristman@lakeheadu.ca.



CIHR funded Supervisor Perspectives Cross-sectional study

Low back pain (LBP) is a prominent health problem for working-age adults and a challenge for workers and employers. About 10 to 20 percent of working adults report that recurring LBP affects their ability to work. Most working adults with acute LBP fully recover or have a short work absence, but others experience chronic back pain with recurring work disability, which impacts their employment status and financial stability.

Research shows that work accommodation prevents sickness absence, improves return to work and shortens the duration of disability for workers with LBP and reduces disability costs for employers. Work accommodations are modifications to the work environment that allow people with disabilities to work effectively, such as modified job tasks, workstations and job schedules; alternate duties; and assistance from coworkers. Supervisors play a key role in the success or failure of the accommodation process. Supervisors' role may involve interpreting medical restrictions to make decisions about accommodations, problem solving, coordination, monitoring to ensure the job accommodations are effective, communicating with health care providers and insurers, and follow-up. Also, injured workers have high expectations that they will receive guidance and support from their supervisor, especially for providing meaningful, respectful, and effective work accommodations.



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Despite the benefits of work accommodation, studies report that they are often poorly planned or executed. Also, injured workers report varying levels of assistance and support from supervisors and many workers who may benefit from workplace accommodation, do not receive accommodation. To address these issues and improve the work accommodation process it is crucial to understand the factors that influence supervisors' support for work accommodations and the decision-making process they use when managing work accommodations. However, very little research has investigated these aspects of work accommodation.

To advance research in this area, Dr. Kristman's team conducted a joint study with researchers

from the Liberty Mutual Research Institute for Safety in the US. The study had two parts. In Part 1, Dr. Kristman's team surveyed supervisors to determine the employer, supervisor, and worker factors that influence supervisors' support for work accommodations. There were no tools to measure supervisors' support for work accommodations, so the team designed the Job Accommodation Scale (JAS), a new questionnaire consisting of 21 job modifications. Part 1 included an evaluation of the JAS. In Part 2, Dr. Kristman's team interviewed supervisors to better understand the decision-making process they use when managing work accommodations and the factors that influence the process. The study involved 19 Canadian and US employers, from a range of industries.



Part 1

Supervisors were contacted by email through their employer and invited to participate in a web survey. The survey described a worker with LBP who was returning to work and needed accommodation. Supervisors completed the JAS by reporting how likely they would be to provide each job modification given the 1) information in the description; and 2) typical job position of the workers they supervised. They were also asked about the specific factors of interest, such as workers' physical job demands; workplace disability management policies and practices, safety climate, and social environment; supervisors' leadership style, autonomy for designing and providing workplace accommodations, and beliefs about pain; and supervisor demographics including education, experience, and the number and unionization status of supervised workers.

Of the 3077 supervisors invited, 26% responded to the survey. Based on the survey data, Dr. Kristman's team developed a model of the combination of factors that best explained supervisors' likelihood to provide accommodations. The most important factors were considerate leadership style, disability management policies and practices, and supervisor autonomy. Higher levels of consideration, better disability management,

and greater autonomy were associated with greater support for accommodations. These results held when the team looked at the three factors individually while controlling for other factors. The model also included workers' physical job demands, industry sector, workplace social capital, number of years as a supervisor, supervisors' country of residence, and whether the returning worker had previous work absences. The factors in the model interacted, such that considerate leadership style had a greater effect on accommodation when there was a positive workplace social environment; and the effect of disability management policies and practices on accommodation depended on the industry sector.

The final element of Part 1, the evaluation of the JAS, suggested this tool was acceptable to use with supervisors in a range of industries and occupations. Supervisors seem to have a single overarching concept of support for work accommodation that the JAS was able to measure. Dr. Kristman's team also found that supervisors use five general strategies for work accommodation: modify the physical workload, the work environment, and the work schedule; find alternate duties; and arrange assistance for the worker.



Part 2

From the web survey, Dr. Kristman's team identified Canadian and US supervisors interested in participating in the follow-up interview. However, the focused only on Canadian supervisors for this part of the study and 23 were interviewed. The team asked supervisors about the factors they consider when finding accommodations for back injured workers, which factors are most important, what processes they follow, and what makes it easier or more difficult to accommodate.

From the interviews, the team learned that supervisors use a "trial and error" or step-by-step decision-making process to manage accommodations for injured workers. They compared what the workers could do to what the job demands were, and if the accommodation selected was not successful, they would repeat the process of comparing worker ability to job demands to select a different accommodation. A striking finding was that the more times this cycle was repeated the less likely it was for the process to succeed. Factors influencing how many times the cycle was repeated included supervisors' decision-making autonomy, medical complexity and quality of medical information, employee motivation, workplace productivity demands, injury circumstances,

supportiveness of coworkers, supervisors' attitude, quantity and quality of communications, supervisors' experience with managing accommodation, and feedback from their employer. Dr. Kristman's team also learned that the majority of supervisors felt unprepared and under-resourced when making accommodation decisions. The time, money and resources used to manage the accommodation process could not be used elsewhere, which created pressure in other parts of the workplace system and caused stress for the supervisors. Without the needed resources to manage it, stress influenced decision quality and accommodation success.

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Conclusions

This study was the first to 1) examine a range of organizational and supervisor factors for their association with supervisors' support for work accommodations for LBP; and 2) identify factors affecting supervisors' decision-making and judgement quality, effort and ability to provide appropriate accommodation.

From this study several factors were identified to be important in influencing supervisors' support for work accommodations. The study also provided insight into supervisors' decision-making process for managing work accommodations. One of the most exciting aspects of these findings is that most of the factors identified may be modified to improve the work accommodation process. For example, research shows that supervisors can be trained in a certain leadership style and we can develop and test training program interventions to enhance considerate leadership style. Similarly, research shows that it is possible to improve disability management policies and practices. Studies to determine how workplace disability management policies and practices can be improved to support supervisors and workers and facilitate the work accommodation process can be conducted. Finally, training programs can be developed

and tested to enhance supervisors' decision-making about work accommodations as well as the factors that affect the quality and success of the process.

Dr. Kristman's team also showed that the JAS is an acceptable measure of supervisors' support for work accommodation. To advance the research in this area, developing good measurement tools is a priority. While further research is needed, such as testing the JAS with actual disability cases, a range of health conditions, and different stakeholder groups, the JAS will make a positive contribution towards this end. In the future, the JAS may be used by workers, supervisors, clinicians and other stakeholders as a problem-solving and communications tool to help with the work accommodation process.

The study's findings are important for all work disability prevention stakeholders. They make a significant contribution to the goal of improving the work accommodation process to prevent workplace disability and reduce its duration to benefit workers, supervisors and employers. But, caution must be used when interpreting and applying these findings. For example, the low survey participation rate



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means that the findings may not be applicable to all supervisors, and the survey and interview findings do not prove cause and effect. Before making changes to policies and practices, additional research should confirm and further explore these findings, and potential applications and interventions need to be developed.

Relevant publications

Kristman VL, Shaw WS, Reguly P, Williams-Whitt K, Soklaridis S, Loisel P. Supervisor and organizational factors associated with supervisor support of job accommodations for low back injured workers. Submitted to the *Journal of Occupational Rehabilitation*, Sept 2015.

McGuire C, Kristman VL, Shaw W, Reguly P. Disability management policies are associated with supervisors' likelihood to accommodate back injured workers. Submitted to *Disability and Rehabilitation*, July 2015.

Williams-Whitt K, Kristman VL, Shaw WS, Soklaridis S, Reguly P. Step-by-step decision-making and strained resources: A qualitative study of supervisors' experiences in accommodating back injured workers. Submitted to the *Journal of Occupational Rehabilitation*, June 2015.

McGuire C, Kristman VL, Shaw W, Williams-Whitt K, Reguly P, Soklaridis S. Supervisor autonomy and considerate leadership style are associated with supervisors' likelihood to accommodate back injured workers. *Journal of Occupational Rehabilitation*, 2015;25(3):589-98.

Shaw WS, Kristman VL, Williams-Whitt K, Soklaridis S, Huang Y-H, Côté P, Loisel P. The Job Accommodation Scale (JAS): Psychometric evaluation of a new measure of employer support for temporary job modifications. *Journal of Occupational Rehabilitation*, 2014;24(4):755-65.

Kristman VL, Shaw WS, Williams-Whitt K. Supervisors' Perspectives on Work Accommodation for the Chronically Ill. In *Working Bodies: Chronic Illness in the Workplace*, edited by Stone SD, Crooks VA, Owen M. Montreal & Kingston: McGill-Queen's University Press, 2014.

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