Canadian Institutes of Health Research–Institute of Aging: Profile

Gender, Work, and Aging*

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The Canadian population is aging, as is the Canadian workforce. Persons aged 65 years and older now outnumber children younger than 14, and the growth rate of the population aged 65 and over is approximately four times that of the rate of the total population (Statistics Canada, 2015a). Of those aged older than 65, over 13 per cent are still-active members of the Canadian workforce (Statistics Canada, 2016). By 2021, nearly one in four Canadian workers will be 55 or older (Statistics Canada, 2011a). Some older adults work because they want to; others work because they have to. The need to keep people active in the labour force grows in response to workforce and skill shortages. Workers, policy-makers, industry, employers, regulators, workplace safety and insurance boards, unions, and professional associations all face challenges and opportunities as they adapt to the unique needs and characteristics of the aging 21st century workforce. Accommodations for older workers need to account for gender, co-morbidity, disability, and caregiving responsibilities. This article provides the rationale for and a description of an initiative jointly led and funded by the Canadian Institutes of Health Research (CIHR) and the Social Sciences and Humanities Research Council of Canada (SSHRC). The *Healthy and Productive Work Strategic Signature initiative* is championed by CIHR's Institute of Gender and Health, the Institute of Aging, and the Institute of Musculoskeletal Health and Arthritis, and aims to provide evidence regarding innovative approaches to support the health and productivity of Canada's diverse and changing workforce.

Gender, Work, and Aging

In Canada, neither work nor aging is a gender-equal opportunity for men and women. In 2011, women comprised slightly less than half of the employed labour force (48.0%), with a different distribution of occupations than men (Statistics Canada, 2011b). Women generally cluster towards the service-providing sector, whereas more men work in the goods-producing sector (Figure 1; Statistics Canada, 2015b). The most common vocation for women is retail salesperson (accounting for 4.7% of all employed women), followed by administrative assistant (4.0%), registered nurse and registered psychiatric nurse (3.4%), cashier (3.3%), and elementary school and kindergarten teacher (2.9%). The most common occupation for men is also a retail salesperson (accounting for 3.3% of all employed men), followed by transport truck driver (2.9%), retail and wholesale trade manager (2.5%), carpenter (1.7%), and janitor, caretaker, and building superintendent (1.7%). The tendency for women to be over-represented in retail sales and administrative positions, and in jobs in the nursing and education sectors (Statistics Canada, 2011b) likely reflects the influence of socialized gender, as does the fact that working women continue to experience a gender gap in income compared to Canadian

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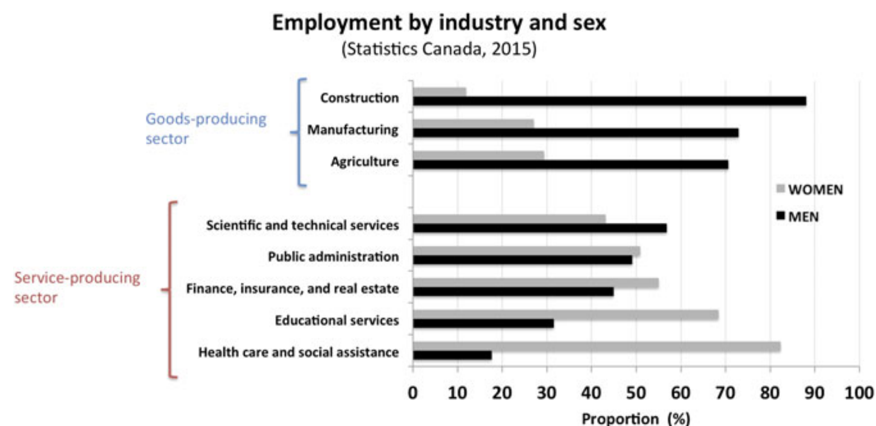

Figure 1: Proportion of men and women working in different work industries. On average, more women work in the service-providing sector whereas more men work in the goods-producing sector

men (Morissette, Picot, & Lu, 2013). Definitions of sex and gender according to the CIHR Institute of Gender and Health are shown in Box 1 (CIHR, n.d.[a]).

Box 1. Defining Sex and Gender

"Sex" refers to the biological and physiological characteristics that distinguish males and females in any species, including humans.

"Gender" consists of the socially constructed roles and relationships, personality traits, attitudes, behaviours, values, relative power and influence that society ascribes to the two sexes.

Sex and gender are understood to be not strictly binary (i.e., there are continua between "female" and "male")

The influence of "sex" and "gender" can overlap and intersect, affecting health and well-being.

Men are more likely than women to suffer compensated work-related injuries, and this is in good part due to the differences in work type between men and women (Smith & Mustard, 2004). Men tend to report more physical injuries, whereas women report mental health issues more often than men (Berecki-Gisolf, Smith, Collie, & McClure, 2015). Hazardous occupational exposures also differ by gender. Male workers are two to four times more likely to report exposure to dust and chemical substances, loud noise, irregular hours, night shifts, and vibrating tools, while women are 30 per cent more likely to report repetitive tasks and working at high speed, and more likely to report exposure to disinfectants, hair dyes, and textile dust (Eng et al., 2011). When men are compared to women with the same occupation, gender-related injury rate differences are attenuated (Fan, McLeod, & Koehoorn, 2012). Interestingly, although the average full-time employee in Canada in 2011 lost 9.3 days of work for personal reasons, women (11.4 days) had higher rates of work loss than men (7.7 days) (Dabboussy & Uppal, 2012). The reasons for this discrepancy remain unclear.

Men and women workers age differently in Canada. Life expectancy at 65 years of age is 22 years for women and 19 years for men (Statistics Canada, 2012). This gender gap increases with advancing age, with there being two women for every man over the age of 85 (Statistics Canada, 2015c). However, despite the larger proportion of women aged older than 65, a larger proportion of older men are in the workforce (18%) compared to women (10%) (Statistics Canada, 2016). As such, men comprise the majority of seniors who continue to engage in paid work beyond the retirement age, although this may change over time.

Work, Disability, and Co-morbidity

Health status declines over time, at varying rates across individuals and genders. Workers aged 45–64 years reported the highest incidence of work absenteeism for illness or disability and the highest number of workdays lost in 2014 (Statistics Canada, 2015d). Workers in physically demanding jobs often cannot continue working beyond a certain age. Those working in manual trades who retire because of poor health or disability probably do so about 20 years earlier than do administrative professionals or managers (Barnes, Smeaton, & Taylor, 2009; Kuper & Marmot, 2003).

Although older workers generally experience fewer on-the-job injuries, their injuries tend to be more severe and take longer to heal when they do occur (Canadian Centre for Occupational Health and Safety [CCOHS], 2012). Nearly 25 per cent of fully retired workers list poor health as their reason for retirement (MacEwen, 2012), suggesting that better accommodation of individual health issues in the workplace might enable retention of older workers with chronic health conditions. For employers, neglecting to consider and deal with an aging workforce will have an impact on life insurance and health plan claim costs, productivity, turnover, early

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retirement, loss of skills, expertise, and profitability (Tishman, Looy, & Bruyère, 2012). There is a pressing need to involve employers and their insurers in prevention and intervention programs, which address the challenge of keeping older workers employed and productive.

Accommodations designed to improve both work and the working environment are especially important for persons with disabilities. Disability rates are on the rise as a result of population aging and associated increases in chronic health conditions. People with disabilities have much to contribute to our society, yet they have a lower rate of labour force participation than their non-disabled counterparts. In 2011, the employment rate of Canadians aged 25 to 64 with disabilities was 49 per cent, compared with 79 per cent for Canadians without a disability (Turcotte, 2014). One of the main causes of physical work disability tends to stem from musculoskeletal disorders (Dewa, Chau, & Dermer, 2010). Spending on disability benefits currently represents a significant burden for public finances and may be holding back Canada's economic growth by reducing the effective supply of labour. For example, direct costs (i.e., directly related to the treatment of the disease) for musculoskeletal disorders have been estimated to be $7.5 billion, whereas indirect costs (e.g., those attributable to lost productivity) have been estimated at $18.1 billion (Coyte, Asche, Croxford, & Chan, 1998). Measures are therefore needed to reduce the economic, social, and human impacts of work disability. Furthermore, reducing the number of disability claims will also alleviate the burden on physicians who often have the difficult task of assessing disability for insurance purposes.

Among the physical health conditions that underlie unemployment and reduced productivity are musculoskeletal disorders and chronic pain. Individuals with chronic pain are estimated to comprise over 50 per cent of the workforce (Harstall & Ospina, 2003; Stewart, Ricci, Chee, Morganstein, & Lipton, 2003); they also have more absences or disability days and are high users of health care services (Pizzi et al., 2005). Obesity is another chronic disease that contributes to various health problems including heart disease and diabetes. In 2008, 37 per cent of Canadian adults were overweight and 25 per cent were obese, and these rates are increasing (Statistics Canada, 2009). Obesity has a significant impact on workplace engagement with an estimated 6.5 per cent to 12.6 per cent of absenteeism costs attributed to obesity (Andreyeva, Luedicke, & Wang, 2014). Furthermore, many individuals with chronic pain or other physical and mental disorders continue to work in a diminished capacity leading to an overall reduction in productivity, a phenomenon known as *presenteeism* (Whitehouse, 2005). Many estimates show that the cost of reduced productivity associated with presenteeism is higher than the costs of absenteeism and direct health care costs combined (Johns, 2010). This is particularly true for pain, obesity, and depression (Mitchell & Bates, 2011).

The low rate of self-disclosure of a disability is a key hindrance to receiving work-related accommodations, as many people with disabilities are poorly prepared to negotiate accommodations that will improve their working environment. Some of the low disclosure rates result from fear of discrimination and job loss (Lindsay, McDougall, Menna-Dack, Sanford, & Adams, 2015). Non-disclosure is concerning because workers with disabilities are at a higher risk of occupational injury if accommodations are not provided (Collins et al., 2005).

Evidence shows that providing work-related accommodations can extend working life, enhance physical and psychological health, and can often be provided at little or no cost to employers (Kirk-Brown, Dijk, Simmons, Bourne, & Cooper, 2014). Despite such benefits, employers struggle with how to accommodate employees with disabilities and the types of accommodations that will facilitate employment. There remains a critical need to determine how employers, workers, rehabilitation service providers, and others can work together to manage disclosure, facilitate the successful implementation of accommodations throughout the working environment, and contribute to a healthy workforce.

A Focus on Mental Health in the Workplace

Many Canadians are experiencing challenges related to workplace mental health. In 2012, about 10.1 per cent of Canadians aged 15 or older reported symptoms consistent with at least one of six mental or substance use disorders in the past year (major depressive episode, bipolar disorder, generalized anxiety disorder, and abuse of or dependence on alcohol, cannabis, or other drugs) (Statistics Canada, 2013a). Depression in particular is the fastest growing category of disability costs to Canadian employers and is at the root of nearly a third of Canadians who quit their jobs (Mood Disorders Society of Canada, 2009). Each week, over half a million Canadians do not go to work because of mental illness, resulting in a loss of $51 billion each year to the Canadian economy (Dewa et al., 2010; Mental Health Commission of Canada, n.d.).

The Mental Health Commission of Canada notes that more than 30 per cent of disability claims and 70 per cent of disability costs are attributable to mental illness. Between $2.97 billion and $11 billion could be saved annually in Canada if mental injuries caused by the actions of employers were to be prevented (Mental Health

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Commission of Canada, 2010). As a result of this and other factors, Canadian employers are under increasing pressure to create a workplace that is psychologically as well as physically safe. In 2009, a report noted a 700 per cent increase in court-awarded settlements due to mental injury in Canadian workplaces over the previous five years (Mood Disorders of Canada, 2009). When workers are healthy, it leads to better productivity, improved recruitment and retention, greater operational effectiveness, and lower costs associated with disability and absenteeism (Mental Health Commission of Canada, 2010). It is therefore critical that multiple stakeholders work together to establish beneficial partnerships to help mitigate the increasing burden of mental health issues on both society and the Canadian workforce.

Gender, Work, and Caregiving

Many working Canadians are responsible for the care of loved ones. Caregiving may extend to parents, spouses, friends, neighbours, other relatives, or children. Eighty-two percent of caregivers aged 19 to 70 are employed, with 70 per cent working full time (Fast, Lero, DeMarco, & Eales, 2014). In 2012, there were 6.1 million employed Canadians who were providing care to a family member or friend; this represents 35 per cent of Canada's workforce (Sinha, 2013). Between 2007 and 2012, the number of Canadians aged 45 and older who were caregivers grew by 20 per cent (Sinha, 2013), and the number of Canadians needing assistance is forecast to double over the next 30 years (Carrière et al., 2008).

Research shows that caregiving can disrupt work routines (e.g., punctuality and absenteeism) and have negative consequences on employment (e.g., reduced work hours, missed opportunities for promotion) (Statistics Canada, 2013b). A minority of caregivers ends up leaving the workforce entirely. In addition to financial and professional consequences, caregiving has been shown to have physical and psychological health effects (Turcotte, 2013), especially for those with low-income work (Williams, Forbes, Mitchell, Essar, & Corbett, 2003). Lack of workplace support via caregiver-friendly workplace practices can result in caregiver-employees leaving the workforce, and/or missed work days, early retirements, reduced productivity, health consequences, and increased avoidable costs to employers. The Conference Board of Canada has estimated the cost to employers in lost productivity to be $1.28 billion per year (Chenier, Hoganson, & Thorpe, 2012).

Women provide more caregiving hours, help with more caregiving tasks, and assist with more personal care than do men (Williams & Crooks, 2008). Women also spend more time on care tasks and "traditionally female" tasks (housekeeping, meal preparation, personal and medical care) that tend to be more time-consuming and allow for less flexible scheduling (Fast, 2015). On average, women spend more of their lifetime providing care than do men (5.8 years vs. 3.4 years) (Fast, Dosman, Lero, & Lucas, 2013). Consequently, women have been found to have higher levels of burden and depression, and lower levels of subjective well-being and physical health (Pinquart & Sörensen, 2003; Williams et al., 2003). Regarding mental health issues, women are twice as likely to be diagnosed with depression (Oliffe & Phillips, 2008), although this may be because a greater proportion of depressive men are not seeking help or are not being properly diagnosed when they do (Oliffe, Ogrodniczuk, Bottorff, Johnson, & Hoyak, 2012). Women also are more likely to experience financial, health, and social consequences as a result of their care work, which can increase the risk of burnout (Fast, 2015).

A subgroup of caregivers, often referred to as double-duty caregivers, deserves special attention. *Double-duty caregiver* refers to the portion of the health-care labour force that double as family caregivers to older relatives. The majority of double-duty caregivers are women who work as nurses (Ward-Griffin, Brown, Vandervoort, McNair, & Dashnay, 2005). When providing four hours or more of care per week, double-duty caregivers are more likely to reduce their work hours, change their work patterns, or turn down a job offer or promotion (Pyper, 2002). Double-duty caregivers who are the least supported and experience the greatest expectations to provide care report worse health outcomes such as mental and physical exhaustion (Ward-Griffin et al., 2009; Ward-Griffin, St-Amant, & Brown, 2011). Nurses who are also personal caregivers experience an increased risk of making drug errors or other mistakes in the workplace (Scott, Hwang, & Rogers, 2006), a decrease in work productivity (Grzywacz, Frone, Brewer, & Kovner, 2006), and an overall inability to provide high-quality patient care.

As caregiving becomes an increasingly common experience for Canadian workers, workplaces will be affected by these caregiving demands. Employers will want to be proactive in implementing gender-sensitive, caregiver-friendly workplace practices to appropriately accommodate caregivers while also sustaining efficiencies in the workplace. Advantages are many, and they include enhanced work-life balance, workforce retention, increased productivity, and reduced costs (Keating, Fast, Lero, Lucas, & Eales, 2014).

Generating Evidence on Best Practices to Promote Healthy and Productive Work

In an attempt to address the changing workplace issues described in this article, the Canadian Institutes of Health

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Research and the Social Sciences and Humanities Research Council jointly launched the Healthy and Productive Work initiative in 2015. The Healthy and Productive Work initiative is a strategic funding opportunity focused on the accommodations and interventions needed to foster labour force participation among people with health issues (e.g., injuries, illnesses, chronic diseases, mental health challenges, and other conditions) and disabilities, as well as older workers and workers with caregiving responsibilities outside of their paid work. Some examples of accommodations include flexible work arrangements, modified work environments, and structured processes intended to enable an employee to return to or remain at work, as well as policy interventions aimed at supporting accommodations.

Recognizing that innovative and new approaches are needed to support the health and productivity of Canada's diverse and changing workforce, the Healthy and Productive Work initiative aims to bring together researchers and stakeholders to maintain a healthy, productive, and inclusive Canadian workforce, and to better understand the complex interplay of factors, including age and gender, that determine successful work outcomes for older men and women. To address the cross-cutting impact of sex and gender across all types of physical and mental health issues, the Healthy and Productive Work initiative has taken important steps to make sure that all applications take sex and gender considerations into account. Applicants are encouraged to demonstrate the use of Sex- and Gender-Based Analysis (SGBA) (CIHR, n.d.) within their proposals. SGBA is an analytical approach that integrates a sex and gender perspective into the development of health research, policies, and programs, as well as health-planning and decision-making processes. It helps to identify and clarify the differences resulting from sex and gender, and demonstrates how these differences affect health status as well as access to, and interaction with, the health care system. Applicants are also being asked to include a "sex and gender champion" as a member of the team, who will ensure that SGBA is conducted and included in the research design.

Ultimately, the goal of the initiative is to develop, implement, evaluate, and scale up innovative, evidence-informed, and gender-responsive solutions to foster the labour force participation of men and women and to improve the health, wellness, and productivity of Canada's diverse workforce. The overall program design and partnerships strategy are built around this aim, with activities and mechanisms designed to ensure that stakeholders' needs, priorities, and knowledge gaps inform every aspect of the initiative. Partnerships will be multidisciplinary, involving researchers from the health and social sciences and/or humanities domains. Partner organizations agree and commit to working collaboratively to achieve shared goals for mutual benefit aligned with the goal and objectives of the initiative. By integrating stakeholders throughout the entire research process, funded partnerships must enable reciprocal flow and uptake of research knowledge between researchers and stakeholders (both within and beyond academia). Researchers and stakeholders must collaborate to develop the research questions, decide on methodology, collect data, interpret the findings, and disseminate the research results. This collaborative approach is expected to increase the likelihood of adoption and uptake of research results.

The initiative follows a two-phase design. The first phase provides two-year Partnership Development Grants to support new or existing partnerships that foster research and related activities. Successful applicants will be invited to submit an application for the second-phase Partnership Grant, which will provide support for partnered initiatives that advance research and related activities pertaining to the Healthy and Productive Work joint initiative. The final results of the research will be available in 2022.

Conclusion

Employers often lack a proper understanding of effective interventions that can be used to accommodate the health needs of older workers, caregivers, people with disabilities, and workers with mental health challenges. They also struggle to accommodate people with recurring, relapsing conditions (e.g., chronic diseases) and mental health issues. Despite the increasing prevalence of mental illness and growing awareness of the importance of work-related mental health, many accommodations focus only on physical health. A sex and gender lens needs to be applied to all of these issues in order to adequately address gender equity and improve health outcomes for different groups of workers. The Healthy and Productive Work initiative represents an opportunity to build capacity to study and develop interventions aimed at accommodating people with various degrees of physical and mental health challenges. The initiative also aims to develop and produce gender-responsive approaches for effective implementation and scaling-up of interventions focused on accommodation and enabling healthy and productive work. Finally, the initiative intends to build capacity and infrastructure for measuring and demonstrating the broader health and economic impacts of these interventions.

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