Safety in Health

Personal support workers' perception of safety in a changing world of work

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Abstract

Background: Most studies on occupational health and safety in home and community care focus on the health and safety of professional health care workers such as nurses and therapists and very few address the occupational health and safety of personal support workers (PSWs) who provide 70–80% of community care in the home. The *PSW Health and Safety Matters!* project provides evidence on the health and safety of PSWs working in the home and community in Ontario.

Purpose: The objective of this paper is to address the question: which occupational risk factors are associated with the PSWs' perception of a safe work environment?

Methods: Data come from our 2015 survey of 1746 PSWs in Ontario, Canada. The endogenous variable in the analysis is the perception of safety on the job. Correlations and logistic regression are employed to examine the associations of safety on the job to a number of work-related exogenous variables that measure organizational support, work environment factors, work experience, and a number of demographic control variables.

Results: The *PSW Health and Safety Matters! Project* reveals that almost one half of PSWs perceived that their job is safe. Findings show PSWs who report having the support of their organizations and who feel their training is appropriate and adequate are more likely to perceive their work environment as being safe. With respect to the work environmental factors measured here, PSWs who report hazards at work and a heavy workload, who experience job insecurity, who have been injured on the job, and who agree that their job requires physical effort are less likely to perceive their work environment as safe. Being a victim of violence or harassment at work is not significantly related to the perception that the job is safe. On the other hand, PSWs who agree that they have control over their work are more likely to perceive their job as safe. With respect to work experience, PSWs with more years on the job are more likely to agree that their job is safe. Working full versus part-time is not significantly related to the perception of safety on the job. With respect to the control variables, neither years of age, birthplace or education level is associated with agreeing that PSW work is safe.

Conclusions: The paper stresses the importance of providing a climate of safety to improve occupational health and safety and the crucial role organizations can play in providing this climate of safety.

Keywords: Personal support workers, Occupational health and safety

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Background

An aging population, hospital restructuring, a rising number of people with (multiple) chronic diseases, and a growing demand for care in the community have seen the growth of the home and community care sector in Canada, the USA, and Europe [1–4]. In Canada, personal support workers (PSWs) are one of the largest and fastest growing occupations. For example, in the province of Ontario, an estimated 26,000 PSWs worked in the home and community sector of home care in 2006 [5], and in 2015, this number was estimated to be 34,000 [6].

PSWs provide help with personal care, household tasks, and some clinical care to people who are ill, convalescent, frail elderly, or disabled in their own homes or in supported independent living environments. PSWs also provide personal interaction to clients many of whom are socially isolated, thereby improving their quality of life [7]. PSWs also labeled as home support worker, home care workers, or home health care aids in other jurisdictions are unregulated health care workers [8].

Most studies on occupational health and safety in home and community care focus on the health and safety of professional health care workers such as nurses and therapists and very few address the occupational health and safety of PSWs who provide 70–80% of the care in the home [3]. PSWs face unique risks on the job to their own health and safety. In the USA, 27,400 recorded injuries occurred among almost 1 million home health care workers [9]. In Ontario, Canada, home and community care organizations have a higher frequency of lost time injuries related to musculoskeletal disorders [client handling and other sources], twice the rate of slips/fall-related injuries, and 20 times the rate for driving-related lost time injuries [10] compared to other rate groups in the health care sector. Although not reflected in the lost time injury statistics, the literature recognizes workplace violence/client aggression and infectious diseases as major areas of concern for health care workers [6, 11, 12].

There is very little research on how the work of caregiving is associated with PSWs occupational health and safety. There are no Canada-wide or Ontario-wide studies; the research that is available is based on single workplaces or case studies of PSWs in a single city or region [13–15]. Further, it is not possible to identify PSWs in the Ontario Workplace Safety and Insurance Board data for occupation-based reported injuries and illnesses analysis as they are grouped with other community health care occupations [16]. Therefore, a province-wide study of PSWs will provide valuable insight on the occupational health and safety of PSWs.

Objective

The *PSW Health and Safety Matters! Project* was designed to provide evidence on the health and safety of PSWs working in the home and community in Ontario, Canada. Using this data, the objective of this paper is to address the question: which occupational risk factors are associated with the PSWs' perception of a safe work environment? In particular, what are the organizational practices, work environmental factors, and employment characteristics associated with occupational safety risks as perceived by these workers?

Literature review

This paper is informed by empirical research that shows that a number of work and workplace factors along with demographic factors can be associated with workers' occupational health and safety. The conceptual model of this study is based on our earlier studies, our partners' experience in the home and community care sector, and the literature reviewed. As Fig. 1 shows, the outcome (endogenous) variables are the PSWs' perception of a safe work environment. The inputs (or exogenous variables), which will be examined in association with endogenous variables, are grouped under organizational practices (organizational support, training at work), work environment factors (hazards at work, workload, clients with unmet needs, job insecurity, injury at work, being a victim of violence or harassment at work, job requires physical effort, control over work, repetitive tasks), and work experience (years as a PSW and working full-time versus part-time). Other variables shown to be associated with occupational health and safety are controlled for in our model (e.g., age, country of birth, education).

There is growing evidence that organizational practices impact occupational health and safety. Lack of organizational support is shown in earlier studies as a statistically significant factor positively associated with home care workers' occupational health and safety [17–19]. Extant research has shown that organizations that provide a "climate of safety" defined as a unified set of cognitions (held by workers) regarding the safety aspects of their organizations are more likely to reduce the incidence of occupational accidents and injuries [20]. Safety training (i.e., the extent to which training is accessible, relevant, and comprehensive) also promotes occupational safety [21].

Work environmental factors contribute to occupational health and safety of PSWs [6, 9, 18]. The client's home is the primary work environment for home and community care. Here, the client is in control of the environmental work conditions not the employer or the PSW. Many community support organizations are often challenged by the lack of safe conditions in the home of the client. These can include the physical hazards at

Fig. 1 Conceptual model of occupational illnesses and injuries relationships for PSWs
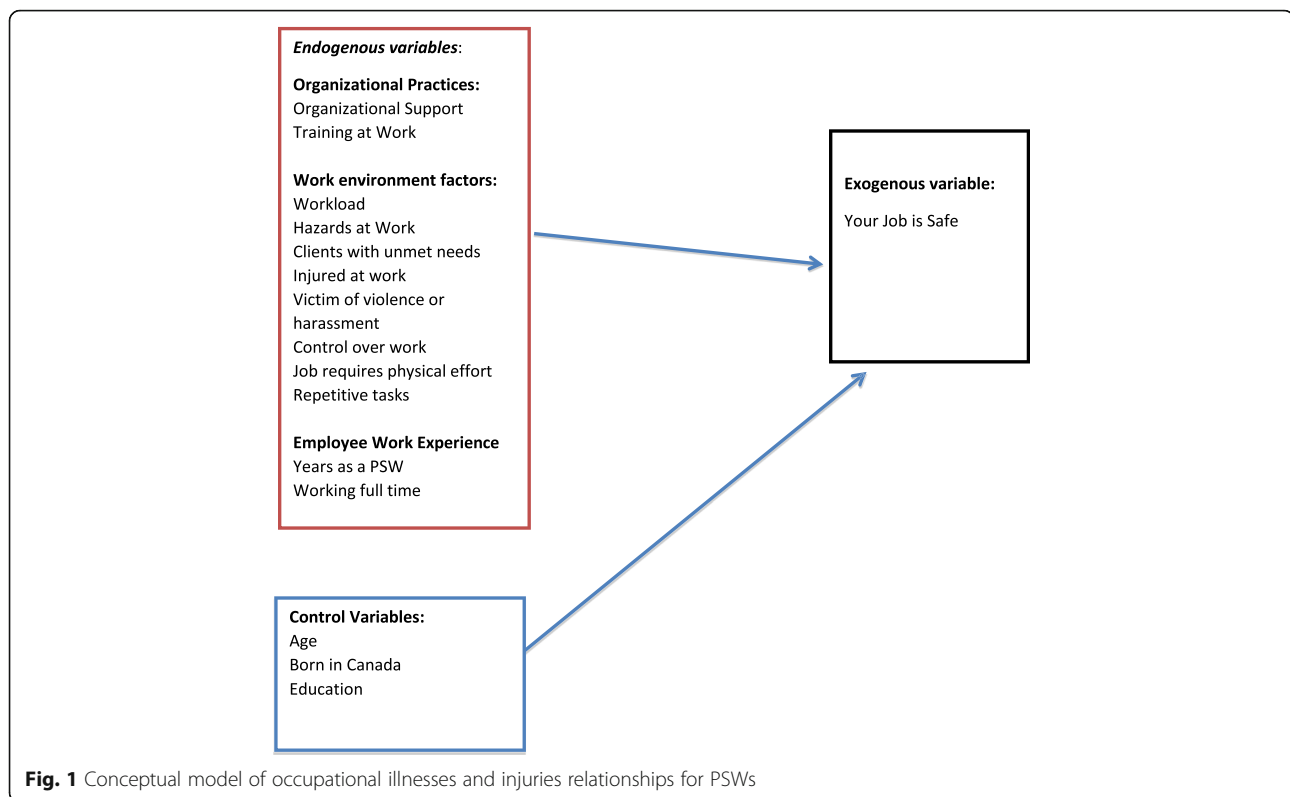
home such as poor lighting, clutter, broken furniture, scatter rugs, lack of client mobility aids, pets, snow/ice on walkways, and even secondhand smoke as well as exposure to unsanitary conditions, communicable diseases, hazardous chemicals, oxygen equipment/tanks and ergonomic issues (e.g., transferring, repositioning clients without proper equipment), and excessive heat. While organizations are attempting to address safety issues through their client service agreements, (e.g., no smoking policies referring to current legislation etc.), occupational health and safety guidelines recommended for the workers can counter the client's preferences and privacy. In addition to the abovementioned work environment factors, clients experiencing at risk behaviors such as the lack of cooperation, physical violence or verbal abuse, sexual harassment, and racial discrimination from clients or informal caregivers as well as responsive behaviors associated with older adults with dementia can also put PSWs at risk for occupational health and safety problems [12, 18]. PSWs have very little control over their schedules [22, 23], and their work is repetitive and physically demanding. Both PSWs working in the Ontario Long Term Care [LTC] Homes and community sectors believe the physical effort on the job such as client lifting, transferring, and repositioning are hazards affecting their occupational health and safety [22].

There are concerns that organizational changes since the 1980s have intensified work in industrialized countries [24, 25]. In the health care sector, short budgets can have long-term effects on occupational health and safety. Workloads can become intensified, increasingly demanding, and stressful [15, 26]. There are concerns that the new work characteristic features of flexibility and resultant job security concerns may affect workers' health and safety [27]. Studies suggest that changes in the nature of work and insecurity in the labor market are possible contributors to an increase in occupational injuries and illnesses [28], stress, and workers' physical heath [15, 29, 30]. Many PSWs work part-time rather than full-time hours, and studies have shown that PSWs who work full-time hours report better occupational health and safety [15]. Further, having more years working as a PSW is associated with poorer occupational health and safety presumably due to the wear and tear on the body of a demanding physical occupation [30]. Together, these factors may contribute to a perception of unsafe working conditions.

Methods
Research project
This paper uses results from a cross-sectional study entitled "The PSW Health and Safety Matters! Survey" [www.pswshaveasay.ca]. This survey was part of a larger

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research project entitled "Keeping Community Based Health PSWs Safe in a Changing World of Work", funded by the Ontario Ministry of Labour. The purpose of the research project was to provide information that will lead to the prevention of injury and occupational health problems for PSWs who provide home and community care in Ontario. This research project was guided by a Research Advisory Committee which includes the Principal and Co-investigators of the project as well as representatives from home care organizations, unions, and a health and safety association in Ontario which have expertise on the occupational health of Ontario community-based Personal Support Workers.

This population of study included PSWs who worked for organizations that provide care to clients in their houses/apartments, privately for clients in their homes/apartments out in the community, adult day programs, retirement homes, and supportive housing programs. No comprehensive population lists of PSWs working in the home and community care sector in Ontario currently existed. Respondents were recruited to participate in the survey in several ways. First, participants were invited to participate in the survey through an email blast sent out through PSW employers, unions, and health and safety organizations. The email blast directed participants to a website where a video explained the importance of and details on how to complete the survey. Participants could either click on a link to complete the online survey or click on a link to request a print-mail survey. A second method of recruitment was the placement of advertisements to promote the survey on organizations' websites, newsletters, and Twitter. A third recruitment strategy at the organization level was the use of several tools including a flyer to promote the survey which could be sent out to employees, a "newsletter article" that organizations could include in their monthly newsletters, and a mini Health and Safety In-service PowerPoint presentation which incorporated our survey. Organizations were invited to use these strategies to promote our survey. Participants were not required to complete the entire survey, although this was encouraged.

The survey was offered either online or in print-mail formats in 2015. Most respondents completed the survey online, but some were completed in the print-mail format. The survey was long, 28 pages in print format. A total of 2341 PSWs participated in the survey and 1746 reached the end of the survey. This paper uses the survey data from the 1746 PSWs who reached the end of the survey. The response rate of the survey is unknown as PSWs completed the survey anonymously and the researchers did not know exactly how many of the estimated 34,000 community-based PSWs in Ontario were reached in our email blasts. There is a risk of bias in that the survey was only offered in English and PSWs whose first language was other than English may have been less likely to complete the survey.

Variables

The PSW Health and Safety Matters Survey was divided into seven sections: your health (i.e., diseases diagnosed by a physician, stress, muscular skeletal injuries, depression, self-esteem); injuries at work and most serious injury at work (i.e, type, location, report, compensation); workplace violence and harassment and workplace theft; characteristics of work (i.e., work experience, hours of work, working full- or part-time, satisfaction with hours, schedule, pay, benefits, member of a union, place of work, etc.); sets of multi-item 5-point Likert questions to measure work life (i.e., characteristics of work, experiences with clients receiving care, and hazards at work); sets of multi-item 5-point Likert questions to measure your organization (i.e., organizational, supervisor and co-worker support, job security and health and safety training); and background characteristics (i.e., gender, birthplace, age, racial or cultural group, education, PSW training, importance of earnings to family's economic well-being). Many questions and the scales used in this paper were developed in the authors' previous research on home care workers [15, 18]. Questions on health conditions diagnosed by a physician, depression, and self-esteem were from the Statistics Canada Canadian Community Health Survey [31].

Respondents were asked to "strongly disagree" to "strongly agree" on a 5-point Likert scales to a series of statements which were used to form a summative score for each scale. Confirmatory factor analysis was applied to all scales to ensure that they maintained a high level of reliability in the 2015 survey. In all summative scales utilized in this paper, missing values were replaced with the mean for each item in the scale, with the caveat that missing values were less than 5% for each question answered. Cronbach alpha (α) was calculated for each scale to ensure a high level of internal validity. The scales and other variables are presented in Table 1 with information on their means, standard deviations, and α and percentages. Several variables were measured using a single statement, and these variables were not normally distributed rather skewed to the right or positive side of the distribution. For this reason, we recoded these measures into dichotomous variables for analysis.

Endogenous variable. The *endogenous variable* in this analysis is the feeling of occupational *safety on the job*. This was measured by a single question. Framed by the introduction "Each of the statements below is something a person might use to describe his/her work as a PSW in the Community," respondents were asked to disagree or agree on a five-point scale [strongly disagree to strongly agree] to the statement "Your job is safe." Respondents who agreed or strongly agreed were considered to have perceptions of safety on the job (coded as 1), and all others were considered to not perceiving job safety ([coded as 0).

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Table 1 Descriptive statistics

Exogenous and control variables	Mean (SD) or %	Min–Max value (Scale α)
Organizational practices		
Organizational support scale	20.76 (4.54)	6–30 (.81)
Training at work scale	24.06 (4.19)	6–30 (.89)
Work environment factors		
Hazards at work scale	24.25 (6.67)	8–40 (.84)
Workload scale	22.15 (5.74)	7–35 (.89)
Clients with unmet needs scale	25.11 (4.48)	7–35 (.76)
Job insecurity scale	18.16 (5.54)	7–35 (.88)
Injured at work	15.1%	N/A
Victim of violence or harassment at work	20.3%	N/A
Job requires physical effort	91.0%	NA
Control over work	46.4%	N/A
Repetitive tasks	69.1%	N/A
Employee characteristics		
Years as a PSW	9.03 (7.69)	NA
Working full-time (30+ hours per week)	58.6%	NA
Control variables		NA
Age	48.9 (11.06)	20–77
Born in Canada	58.6%	N/A
Education		1–7
Less than high school diploma or equivalent	2.5%	
High school diploma or high school equivalency certificate	12.6%	
Trade certificate or diploma	12.0%	
College, CEGEP, or other non-university certificate or diploma (other than trades certificate or diploma)	57.5%	
University certificate or diploma below the bachelor's	4.6%	
Bachelor's degree (i.e., B.A., B.Sc., LL.B.)	8.0%	
University certificate or diploma above the bachelor's level	2.8%	

Exogenous variables. Two variables measure *Organizational Practices*. Organizational support [18, 15] is measured by a six-item scale which includes statements such as "Your organization supports you in times of personal crisis, or illness or needing time off to help care for other family members". Training at work scale, developed by the authors, includes seven items such as: "Your organization offers you work-related training to help you retain and update your skills".

Work environmental factors are measured by nine variables. Hazards at work is measured as an eight-item scale derived from the author's previous research [18]. Example items included in the scale are "You work in unsafe neighbourhoods or homes/apartments (i.e., high crime areas,

drugs, alcohol)"; "You are exposed to poor physical conditions in client's homes (i.e., cleanliness, hoarding, roaches, bedbugs.)" Workload is measured as a seven-item summative scale adapted from the authors previous work [18]. Five-point Likert scale items include for example: "You have too much to do in this job"; "You are expected to do too many different tasks at the same time"; and "Your workload is heavy." Clients with unmet needs [18] is a seven-item scale which includes "You work with clients whose needs are not being met" and "There is not enough emphasis on care for the 'whole person'." In this analysis, a seven-item scale adapted from Cameron et al. by the authors [19, 32] is used to measure job insecurity. Items include the following: "You are concerned about losing your job because of changes in your organization," and "You are worried about your job security." In the analysis, having an injury at work in the past 12 months was coded as a dichotomous variable (0 = no, 1 = yes). Being a victim of violence or harassment at work was measured by asking respondents to respond yes (= 1) or no (= 0) to the question, "In your job as a PSW in the community, in the past 12 months, have you been a victim of physical or sexual violence or harassment?". Workplace violence was defined in the survey as "either the threat of, attempt to, or exercise of physical force against you. This may be physical [i.e. scratching, pinching, pushing, spitting, slapping/hitting, kicking, biting, punching, restraining] or sexual violence." Harassment was defined as "any behavior that demeans, humiliates, annoys, alarms, or verbally abuses you and that is or would be expected to be unwelcome. This includes words, gestures, intimidation, bullying, or other inappropriate activities."

Job that requires physical effort is measured as dichotomous variable coded 0 (strongly disagree, disagree, and neither agree nor disagree) and 1 (agree or strongly agree) to the statement "Your job requires physical effort." Control over work is a dichotomous variable coded 0 (strongly disagree, disagree, and neither agree nor disagree) and 1 (agree or strongly agree) to the statement "You have the freedom to decide how to do your job." Repetitive tasks variable is also dichotomous coded 0 (strongly disagree, disagree, and neither agree nor disagree) and 1 (agree or strongly agree) to the statement "Your job requires that you do the same tasks over and over every day."

PSWs *work experience* is measured by two variables. Years as a PSW was calculated from a question asking respondents which year they started working as a PSW in the community. Working full-time is measured as working 30 or more hours per week.

The *control variables* used in this analysis include age, nativity status, and education. Age is coded as number of years. Respondents were asked if they were born in Canada (coded 0 = no, 1 = yes). Education is measured by a seven-point scale ranging from "less than high school

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diploma or equivalent" to "University certificate or diploma above the bachelor's level." Gender will not be included as a control factor since this is a female dominated occupation, and it is established in the literature that the job content or other workplace factors are determinants of occupational illnesses and injuries rather than biological factors such as hormonal differences [33].

Analysis

Descriptive statistics, correlations, and logistics regressions are conducted. Correlations are not presented here but are available from the authors, and logistic regressions results are presented in Table 2. In the regression analyses, for missing values, listwise deletion method is used yielding 1512 respondents in the analysis. The subjectively assessed variables may not be completely independent from each other, and thus, collinearity diagnostics (tolerance and variance inflation factor analyses) were also conducted. Collinearity with dependent variables were not found. SPSS Statistics v.24 is used in the analysis.

Results

Findings from the *PSW Health and Safety Matters! Project* reveal that almost one half (45%) ($N = 1710$) of PSWs perceived that their job is safe. The analysis considers the association between the perception of a safe work environment among PSWs in Ontario and a set of variables that measure the organizational practices, work environment factors, employees work experience, and a few demographic control variables. Table 1 shows the descriptive statistics for the exogenous and control variables included in the analysis. Scale variables show the mean (M), range (R), and standard deviation for each variable. Categorical variables are described by their frequencies.

Based on the means for each scale, most but not all respondents agreed that they enjoyed organizational support ($M = 20.76$, $R = 6$–30) and had adequate training ($M = 24.06$, $R = 6$–30). Respondents reported many hazards at work ($M = 24.25$, $R = 8$–40), and most respondents agreed that their workload was heavy ($M = 22.15$, $R = 7$–35). Many respondents identified clients with unmet needs ($M = 25.11$, $R = 7$–35). Findings suggest a moderate degree of job insecurity ($M = 18.16$, $R = 7$–35). Fifteen percent of PSWs reported having had an injury at work in the past 12 months. Thirty percent of the sample had reported being a victim of violence or harassment at work in the past 12 months. Almost all (91%) of respondents agreed or strongly agreed that their job requires physical effort. Just under one half (46%)

Table 2 Logistic regression: your job is safe on organizational practices, work factors, employee characteristics, and control variables

Exogenous and control variables	B	Std Error	WALD	Significance	Exp (B)	95% CI for Exp (B)	
						Lower	Upper
Organizational practices							
Organizational support	.079	.019	16.672	.000	1.082	1.042	1.123
Training at work	.046	.021	4.785	.029	1.047	1.005	1.092
Work environment factors							
Hazards at work scale	− .050	.010	22.839	.000	.951	.932	.971
Workload scale	− .029	.014	4.673	.031	.971	.946	.997
Clients with unmet needs scale	− .032	.017	3.510	.061	.968	.936	1.001
Job insecurity scale	− .061	.013	23.525	.000	.941	.918	.964
Injured at work	− .571	.177	10.367	.001	.565	.399	.800
Victim of violence or harassment at work	− .163	.163	.989	.320	.850	.617	1.171
Job requires physical effort	− .195	091	4.572	.032	.823	.688	.984
Control over work	.453	.121	14.011	.000	1.573	1.241	1.994
Repetitive tasks	.249	.133	3.535	.060	1.283	.989	1.665
Employee characteristics							
Years as a PSW	.034	.009	13.980	.000	1.034	1.016	1.053
Working full versus part-time	.199	.122	2.660	.103	1.220	.961	1.551
Control variables							
Age	− .011	.006	3.427	.064	.989	.977	1.001
Born in Canada	− .034	.131	.068	.794	.967	.748	1.248
Education level	.084	.050	2.862	.091	1.088	.987	1.199
Constant	.818	.845	.937	.333	2.266		

$N = 1512$ with listwise deletion of data

of PSWs agreed or strongly agreed they had control over work. Over two thirds (69%) of PSWs felt that their job has repetitive tasks. In terms of their work experience, PSWs had been employed an average of 9 years. Just over one half (59%) of the sample reported working full-time and 41% reported working part-time, i.e., less than 30 h per week. Average age of the PSWs was 49 years, with 59% reporting that they were born in Canada. Most (73%) PSWs reported having a college or equivalent or higher education.

Findings from the correlation matrix (not reported here) show that Your Job is Safe is positively correlated with organizational support, training, and having freedom to do your job. It is negatively associated with experiencing hazards on the job, having a heavy workload, working with clients with unmet needs, job insecurity, being injured on the job or having experienced physical or sexual violence or harassment, and physical effort of the job. There is no association with the years on the job, working full-time, age, being born in Canada, or education level. The matrix also shows the many positive and negative associations between the variables that measure organizational practices, work factors, work experience, and the control variables. Therefore, the next step in the analysis was to examine the relationship of Your Job is Safe to the organizational practice, work factors, work experience, and control variables, holding each of the other variables constant.

Table 2 reports the logistic regression coefficients and significance levels. PSWs who report having the support of their organizations (.079, sig .000) and who feel their training is appropriate and adequate (.046, sig .029) are more likely to perceive their work environment as being safe. With respect to the work environmental factors measured here, PSWs who report hazards at work (− .050, sig .000), a heavy workload (−.029, sig .031), who experience job insecurity (−.061, sig .000), who have been injured on the job (-.571, sig .001), and who agree that their job requires physical effort (−.195, sig .032) are less likely to perceive their work environment as safe. Being a victim of violence or harassment at work is not significantly related to the perception that the job is safe. On the other hand, PSWs who agree that they have control over their work (.453, sig .000) are more likely to perceive their job as safe. With respect to work experience, PSWs with more years on the job (.034, sig .000) are more likely to agree that their job is safe. Working full- versus part-time is not significantly related to the perception of safety on the job. With respect to the control variables, neither years of age, birthplace, or education level is associated with agreeing that PSW work is safe.

Discussion
This paper contributes to academic and practitioner knowledge in a number of ways. First, building on and integrating workers' health research published in separate disciplines [15], this paper takes an interdisciplinary approach to examine occupational risk factors associated with PSW's perception of safety on the job. Second, this study contributes to academic and practitioner knowledge as it is the first province-wide occupational health and safety data collected on PSWs in community home care in Ontario, Canada [17], making our study findings important and critical evidence on workers' safety. Third, the large sample size and comprehensive content of the survey provide exploratory results that may be informative to PSWs in Ontario and in other jurisdictions. Fourth, the evidence provided in our study will help to inform health and safety prevention strategies for all stakeholders [employers, unions, worker's associations, health and safety associations, government decision-makers, researchers and other care providers (family members)] enhancing the safety and health of the PSWs and subsequently enhancing the care of their clients.

The data and study results are limited by the fact that our sample is a convenience sample, and therefore, our findings are associations between variables and cannot be attributed to causal effect. We have no way to check for bias in our sample since no population-based information is available on the characteristics of PSWs in Ontario. Perhaps, a national-level data collection, through Statistics Canada, or the collection of specific data on PSWs' work, health, and safety care can be collected. Another limitation of our study is that we were not able to collect organization-specific data on work and occupational health and safety issues and match individual respondents with data from their employers. We recommend future studies to build on our study and extend it by collecting a matched employer-employee data.

The findings point to a number of tensions between the provision of care and creating a safe work environment.

First, there is a tension between creating a climate of safety in the home and the way people choose to live. Homes may not be organized to create a safe work environment in terms of cleanliness, physical conditions (e.g., temperature, furniture, healthcare equipment), allergens etc. The worksite is after all the client's home, and as such in Ontario, Canada, it is not covered under workplace safety legislation.

Proper equipment/supplies for cleaning homes or lifting/transferring or repositioning clients may not be available. Some agencies do inspections/assessments prior to organizing a home visit for client care and make recommendations to improve safety but they cannot enforce compliance. In the worst-case scenarios, care may be withheld until the client home safety (workplace safety) is ensured, but it is difficult to deny care to those in need. Many organizations have client service agreements in place which delineate the responsibilities of both the client and the care provider (employer of the PSW) and often these include reference to conditions related to smoking,

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pets, safety equipment etc. Often, however, the client may be intending to comply with or working on compliance with the agreement, but the PSW is already in the home providing care while conditions are still not safe. This is an area for future studies both regarding what policies organizations have in place as well as adherence to these policies by the client, the organization, and the worker, and funder expectations and their understanding of the challenges facing employers, PSWs, and the client.

In Ontario, and as in many other jurisdictions, the PSW has the right to refuse unsafe work under the Occupational Health and Safety Act. Taking precautions to protect workers' health and safety can, in the long run, be cost-effective as there will be fewer injuries and illnesses among this workforce. Agencies (employers) should provide terms and conditions of services for the delivery of home care services. A risk assessment and inspection of the home should be done prior to delivery of care by the PSW. Where there are high risk situations or unsafe physical environments (broken stairs, trip hazards, dogs, high-crime area), the employer (agency) must assume responsibility for mitigating potential risks to the worker such as informing the client of requirements (i.e., fixing stairs, ensuring dogs are kept locked etc.). Hazards such as ice, dim lighting, scatter mats, smoking when PSWs are present, and dogs can be avoided if negotiated with the client. As well, aids to mitigate some risks in the short-term can be proactively addressed by the employer by providing the PSW with necessary small items for safety (e.g., key ring alarms and flashlights).

In terms of creating safe physical conditions, needed equipment, such as mechanical lifting devices, transfer sheets etc., can and should be provided for care at home. Equipment to assist PSWs can reduce body's wear and tear in caring for adults by lowering the physical demands to lift/position clients. Since PSWs may be required to work in unsafe neighborhoods or homes and apartments if the individual receiving care is living in such an environment, specialized training and innovative models of care are needed along with the funding to support these efforts to foster safety for both the PSW and the client.

Second, there is a tension between the heavy physical demands placed on the PSW and the health of the PSWs. Providing care in the homes of clients can be physically demanding, yet care cannot be denied to the most vulnerable. Our results show that those who agree that they have a job that requires physical effort are less likely to perceive their job is safe. Also, over time, the physical demands placed on the PSW may result in injuries. This is important as 15% of study respondents reported having an injury at work in the past year. Furthermore, this analysis shows that those who reported having an injury at work were less likely to perceive their job as safe.

Solutions may lay in reducing the occupational health and safety issues through proper training, equipment, and different models of care delivery such as providing two PSWs for clients in need of repositioning or mobilizing and for clients who exhibit risky behaviors. Again, these solutions have implications for the employer and need to be addressed in order to provide safe/quality client care. It is not only the PSW that is affected. Models that include a floating PSW that travels to client's home for the sole task of assisting with client handling/transfers and repositioning could be considered. The cost of not having a PSW to provide client care due to injury or illness and the time required to recruit and re-orient PSWs to the client are basic examples of why addressing occupational health and safety procedures are important. This data provides employers and funders an opportunity to work towards better solutions for workers' health and client care.

Training methodology can also be reviewed to include mandatory in-services annually to ensure practice readiness by PSWs. There are new virtual training experiences that are being researched, and these could potentially be useful for the community PSW sector and could be less financially strenuous. Consideration also needs to be given to the learning styles of different PSW age groups. Current methods of training may be inadequate for millennials; they are just in time learners and need availability of information such as on apps when they need it.

Training alone will not impact injury reduction—employers must ensure a client assessment is completed, proper equipment is provided, and organizational safety policies are developed, implemented, and evaluated—the key is in the "integration" of safety into the core job.

Third, there is a tension between providing adequate and appropriate care and the funds available to finance home and community care. With the aging of the population and limited health care dollars flowing to community care, workloads are increasing [15, 26]. Further, our data indicates that home and community health care organizations are choosing to maintain flexible work environments and are unable to provide secure full-time employment to their staff. Many PSWs are working in part-time or casualized jobs and as a result are worried about their job security [15]. With this worry, findings suggest that they are less likely to view their jobs as safe. Many PSWs have concurrent employment—working for more than one agency to achieve full-time employment. Additional funding to the home and community care sector would help to reduce workloads, fund additional training opportunities, increase the quality of care to clients, and help the sector move toward providing more full-time and secure jobs with good pay and benefits thereby reducing job insecurity and fostering a perception of safety on the job.

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In Ontario, Canada, and elsewhere, the health care sector is mandated to put "patients first" [6], but the challenge is to balance the needs of the client with the competing demands of the job. While care for the patients should be the primary concern, such care cannot be provided if the workforce's own safety and health is not considered simultaneously. The health care system should provide PSWs a safe work environment where they are seen and told by the decision-makers that they are the backbone of home and community care sector; they are assisted by the managers and other decision-makers and adequately compensated for their demanding work. Such genuine appreciation of PSWs work can contribute to achieving the goals of the "patients first" initiative.

Research examining the employee safety outcomes suggested that the promotion of a "climate of safety," could dramatically improve worker health, safety, and psychological well-being [20, 33–35]. According to Probst and Brubaker (2004), a climate of safety includes management values (i.e., the extent to which management places a high priority on safety), safety communication (i.e., the extent to which there is an open exchange of information regarding safety), safety training (i.e., the extent to which training is accessible, relevant, and comprehensive), and safety systems (i.e., the extent to which safety procedures are perceived to be effective in preventing accidents) and has been shown to be predictive of safety-related outcomes at work such as accidents and injuries, safety compliance, safety motivation, and safety knowledge [20].

Finally, and most importantly, organizational factors play a crucial role to improving a "climate of safety" in home and community care. The data indicates that when employers support their staff in times of personal crisis or illness, when opinions and ideas are heard, when adequate information is provided to care for clients, when potential risks are assessed and communicated, and when the organization allows PSWs to seek assistance with heavy client lifting demands, the findings show that the perception of safety is much higher.

Conclusion

The results of this analysis have shown that many factors are associated with perceptions of job safety for PSWs. Safety on the job is impacted: by organizational practices such as organizational support and training; by work environmental factors such as hazards on the job, workload, job insecurity, being injured at work, the physical demands of the job, and lack of control over work; and by employee characteristics such as years of work experience. Having a safe work environment in the home is important for many reasons. Safe work environments would lead to less health problems and fewer loss time injuries for PSWs creating a more stable work environment. Quality of care will be improved as numerous studies have shown that continuity (having the same home care workers) is a very important determinant of quality of care. Last, but not least, creating a safe work environment will benefit both the PSWs as well as the client and their informal care givers.

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Consent for publication

Not applicable.

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