



STANDARDS RESEARCH

Employees' Perceived Psychological Health and Safety Experience During COVID-19 Through an Inclusion Lens

March 2023

Authors

Dayna Lee-Baggley, PhD, Chief of Research, Howatt HR Applied Workplace Institute; Adjunct Professor, Saint Mary's University; Assistant Professor, Dalhousie University

Bill Howatt, PhD, EdD, Founder and CEO, Howatt HR Consulting

Advisory Panel

Mary Ann Baynton, Director of Collaboration and Strategy, Workplace Strategies for Mental Health, Toronto, ON

William Roy, Director, Prevention Office, Ontario Ministry of Labour, Training and Skills Development, Toronto, ON

Anne Tennier, President and CEO, Canadian Centre for Occupational Health and Safety, Hamilton, ON

Troy Winters, Senior Officer, Health and Safety, Canadian Union of Public Employees, ON

Candace Sellar, CSA Group, Toronto, ON

Fiona Manning, CSA Group, Toronto, ON (Project Lead)

Acknowledgments

The authors wish to thank the following individuals for their contributions to the research project, including web design, data collection, data analyses, generating data tables and results, review of literature, writing and reviewing, and providing feedback on draft versions.

Ehsan Etezzad

Al Kingsbury

Audrey Kruisselbrink

Holly Truglia

This study was approved through Saint Mary's University Research Ethics Board (SMU REB #21-053) and met academic and ethical standards.

Disclaimer

This work has been produced by the authors and is owned by Canadian Standards Association. It is designed to provide general information in regard to the subject matter covered. The views expressed in this publication are those of the authors and interviewees. The authors and Canadian Standards Association are not responsible for any loss or damage which might occur as a result of your reliance or use of the content in this publication.

Table of Contents

Executive Summary	5
1 Introduction	7
2 The Current Study: Phase II	8
2.1 Psychological Health and Safety in the Workplace	8
3 Psychological Health and Safety During COVID-19	9
3.1 Employee-Level Supports	10
3.2 System-Level Supports	11
3.3 Inclusion in the Workplace	12
4 Methods	13
5 Results and Discussion	15
5.1 Sample Characteristics	15
5.2 Practices, Policies, and Programs Offered by Organizations	15
5.3 Psychosocial Factors	15
5.4 Psychosocial Hazards	16
5.5 Inclusivity and Intersectionality	19
5.6 Qualitative Results	20
5.6.1 Most Significant Impact	20
5.6.2 Biggest Gap	24
5.6.3 Needed Initiatives	25
6 Discussion and Recommendations	26
6.1 Ways to Improve PHS in the Workplace	26
6.2 Employee-Level Supports	26
6.3 System-Level Supports	27
6.4 Inclusion in the Workplace	28

**6.5 Recommendations for Changes and Improvements for
CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2022)**..... **29**

6.5.1 The Importance of Employee Engagement..... 29

6.5.2 The Importance of Fostering Inclusivity..... 30

6.5.3 The Importance of Continuous Improvement and PDCA..... 30

6.6 Limitations and Future Directions..... **30**

6.7 Conclusion..... **31**

References..... **32**

Appendix A – Survey Items..... **41**

Appendix B – Additional Tables..... **56**

Executive Summary

The COVID-19 pandemic has emphasized the importance of supporting employees' psychological well-being. In a recent research study, we examined employers' responses to the pandemic and actions taken to support employees' mental health. The current study builds upon the previous research report that evaluated the employer perspective by evaluating the employees' perspectives. We examined employees' experiences in the workplace using a diversity and inclusion lens. This employee-focused research offers insights into what employees believe their employers are doing well and what can be improved in light of the COVID-19 pandemic. By examining employer perspectives alongside employee experiences, we identified discrepancies and generated actionable recommendations for employers to improve psychological health and safety in the workplace. CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2022) highlights the importance of continuously engaging employees to obtain their insights and feedback on the effectiveness of programs and policies intended to protect and support their mental health. Thus, understanding the employee experience is critical to facilitating a psychologically healthy and safe workplace.

Method and Results

This study included a literature review and an online survey distributed to Canadian employees to capture their insights on available workplace resources for psychological health and safety. We divided these workplace supports into employee-level and system-level. Employee-level supports are services directed to employees, typically after challenges have emerged. These supports are typically designed for each employee to access at their discretion. System-level supports are designed to create workplaces that mitigate risk factors and promote protective factors in support of mental health, consistent with CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2022). System-level supports can pre-empt issues and positively impact all workers.

This online survey involved a mixed-method design. The survey asked a diverse sample of the Canadian workforce to complete a series of quantitative and qualitative questions to understand their experiences with workplace mental health support during and following the COVID-19 pandemic. Our final sample consisted of 1,413 Canadian employees. We observed many similarities between employer and employee top concerns regarding psychosocial factors and hazards during the pandemic. However, the need for engagement was a consistent theme: employees felt their employers often did not understand their needs and did not engage or communicate with them directly. This result indicates that communication and engagement with employees are as important as (or potentially more important than) policies and programs. This study successfully recruited a participant sample that spanned several visible and invisible forms of diversity. We included a measure of inclusivity, which comprised aspects of belonging, feeling valued, and respected. Perceived inclusivity was associated with many workplace factors, including disability leaves and experiences with harassment. Employees who reported low levels of inclusivity also reported more barriers to accessing services despite a desire to use these services. Employers must recognize that all policies and programs are not equally available or experienced in the same way across employees. Engagement with employees spanning diversity and inclusion is critical to ensuring that programs and policies are available and impactful for all employees.

Recommendations and Conclusions

Psychological health and safety can be achieved when employees and employers work collaboratively. Employees can act to promote their mental health, and employers can mitigate the impact of negative (e.g., draining) psychosocial factors that pose risks to mental health. This study highlighted the importance of considering both employee- and system-level supports. Employers can broaden how they address psychological health and safety in the workplace and should not solely depend on employees to access employee-level supports to improve well-being. System-level supports can improve the experience for all employees by preventing challenges and providing a supportive environment for those experiencing problems. Inclusivity impacts many workplace factors, from disability leaves to barriers in accessing support. This finding highlights the need to focus on inclusivity and to recognize the many visible and invisible forms of diversity.

CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2022) highlights the importance of continual improvement to practices and policies in the workplace. A Plan-Do-Check-Act (PDCA) approach is critical to support ongoing and positive workplace mental health. Both the employer and employee studies noted significant gaps in adopting and practicing a PDCA approach, especially regarding the "C" (checking) and the "A" (acting or adjusting). The "checking" includes engagement with employees to ensure that their voices are heard and understood. This study provides an example outlining how employers may use metrics to better understand whether their mental health initiatives are impacting psychological health and safety as intended and how to engage in continuous improvement. Finally, this study summarizes employer actions to protect employees, positively influence the employee experience, mitigate mental harm, and promote mental health.



“The COVID-19 pandemic has emphasized the importance of supporting employees’ psychological well-being.”

1 Introduction

The COVID-19 pandemic has brought unprecedented recognition of the importance of supporting employees’ psychological well-being. More employers are reducing employees’ risk of mental health harm (i.e., psychosocial factors) and mental injuries (i.e., workplace trauma) by supporting workers experiencing mental illnesses (e.g., generalized anxiety disorder) and promoting mental wellness. With the onset of COVID-19, employees’ psychological health and safety (PHS) became a more prominent topic of concern for organizations across all sectors and employers.

In a recent research study (Phase I), we examined employers’ responses to the pandemic regarding actions to support employees’ mental health [1]. The study was guided, in part, by CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2022), *Psychological health and safety in the workplace*, designed to advise employers on facilitating PHS in the workplace [2]. For example, consistent with CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2022) we examined psychosocial factors and hazards in the workplace. The research provided key insights into the psychosocial factors and hazards of greatest concern for employers and their progress in addressing these concerns. Workload management, protection of physical safety, and organizational culture were common psychosocial factors of concern for employers. Burnout and stress/distress were employers’ most common psychosocial hazards of concern.

Employers differed in the extent to which they had made progress on these concerns, with more progress made to address psychosocial factors than psychosocial hazards.

We also identified notable opportunities for improvement through this study. Firstly, just over 50% of employers were either unaware of, or not using, CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2022), suggesting an opportunity to increase awareness of its requirements. Second, CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2022) highlights that continuous improvement is a core imperative for implementing a successful PHS management system. PDCA is a common model (described in more detail in the first study) that actively promotes continuous improvement. However, our study showed that few respondents reported that their organization collects data on the impact of mental health programs and policies in a way that could contribute to continuous improvement [1] programs because the data commonly used to evaluate their effectiveness were often unavailable to employers. Thus, the “check” and the “do” stages of continuous improvement were often lacking according to employer respondents. Third, respondents acknowledged that employee engagement was lacking and not sufficiently integrated into employers’ efforts to create, implement, and evaluate their programming. Finally, the study highlighted the importance of considering diversity and inclusivity to understand the employee experience.

In Phase I, we identified a gap in our understanding of the employees' experiences regarding organizational psychosocial factors and hazards, awareness of available workplace programs and policies, and the perceived value and impact of these programs and policies. Phase II builds upon the previous employer-focused study to capture employees' perspectives and compare across these complementary perspectives. In particular, the importance of diversity and inclusivity was a key focus in this follow-up study to capture employees' perspectives.

This research provides insights into what employees believe employers are doing well and what can be improved. By examining employers' perspectives alongside employees' experiences, we may identify discrepancies and generate recommendations for actions employers can take to improve PHS in the workplace.

2 The Current Study: Phase II

Phase II is intended to understand the employee experience of PHS during the pandemic. This research considers the employees' experiences through an inclusion lens. There is a gap in workplace mental health research examining employees' perceptions of employers' responses during the pandemic regarding policies, programs, and initiatives for PHS. Phase II Study outcomes are intended to inform future updates to CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2022), *Psychological health and safety in the workplace* [2], CSA Z1008:21, *Management of impairment in the workplace* [3], and CSA Z1011:20, *Workplace disability management system* [4]. This study involved a mixed-method design, asking a representative sample of the Canadian workforce to complete a series of quantitative and qualitative survey questions to understand their experience regarding workplace mental health during and following the COVID-19 pandemic.

This research project's main objectives are to:

- i. examine the employee experience regarding PHS in the workplace during the pandemic, particularly the employees' top psychosocial factors and hazards during the pandemic;
- ii. understand employees' experience (e.g., awareness, use, and impact) with employer policies, programs, and supports intended to impact PHS in the workplace during the pandemic; and
- iii. explore, through an inclusion lens, how employees perceived their employers' PHS supports, programs, and policies.

2.1 Psychological Health and Safety in the Workplace

The COVID-19 pandemic highlighted that employees value mental health support in the workplace [5]. "Psychological health and safety" refers to a comprehensive view of mental health in the workplace that includes mitigating the risk of mental harm and promoting employee mental health [6]. Like physical safety, psychological safety is the employers' responsibility. However, employers and employees must both contribute to create and maintain a psychologically safe environment [7]. For example, employees can invest in their mental health through mental fitness, physical fitness, help-seeking behaviours (when needed), and developing psychologically safe relationships within and beyond the workplace. Employers can mitigate adverse employee experiences by recognizing and addressing key psychosocial factors and hazards to improve overall working conditions. Numerous surveys have examined the prevalence of disability claims attributed to mental health challenges, highlighting a potential motivation for employers to invest in employee PHS. For instance, a survey by Telus Health reported that short-term disability claims due to mental health issues increased by 6% and increased in duration by 12% in 2021 [8]. Deloitte found that 30% to 40% of short-term disability claims are due to mental health issues [9]. According to data from Canadian Life and Health Insurance Association members, claims for mental health supports increased by 24% in 2020 [10]. A recent survey by the American Psychological Association [5] reported that 81% of survey respondents agreed that employer support for mental health was an important consideration in their job search. Furthermore, 30% of respondents strongly agreed that employer support for mental health factored into their job decisions. Together, these studies emphasize the importance of mental health for employees, particularly concerning the COVID-19 pandemic.

In response to increasing workplace challenges introduced through the COVID-19 pandemic, several organizations have developed resources for their employers and employees. For instance, the Canadian Human Rights Commission released a report focused on mental health in the workplace [11]. This report discusses the importance of mental health in the workplace throughout the COVID-19 pandemic and guidance for both employers and employees as they navigate a changing work environment. For employers, the report's recommendations include steps for communicating openly and engaging in a two-way dialogue with their employees to boost confidence, promote a sense of security, and mitigate anxiety. Employers should be prepared listen with empathy and foster an environment in which questions are encouraged so that employees know that everyone is navigating the atypical circumstances together. Finally, the report recommends that employers lead by example to proactively manage employee concerns, such as defining boundaries that promote work-life balance and introducing new practices that help to minimize negative mental health symptoms. For employees, the report recommends prioritizing self-care, establishing a schedule for remote work, and other healthy habits to maintain physical and mental health. Employees are encouraged to communicate their needs and concerns with their manager, to work with their manager to determine a schedule with clear boundaries, and to find time to disconnect from work. Overall, this report provides clear and actionable guidelines for employers and employees to adopt to mitigate the negative impact of the COVID-19 pandemic and changing public health guidelines.

Additionally, the Canadian Centre for Occupational Health and Safety released a collection of tip sheets, with guidance for various workplaces and staff that provide information for dealing with COVID-19 [12]. This toolkit spans topics such as workplace health and safety planning tips, mental health, addressing anxiety, burnout, managing social isolation, stigma, and other psychosocial themes. In the United States, the surgeon general released a similar framework for workplace mental health and well-being, highlighting how prioritizing both physical and psychological safety in the workplace provides a strong basis for organizations and the overall workforce to thrive [13,14]. Together, these organizations' resources stress the importance

of open communication and proactive, adaptable support for employees, in addition to the employees' role in promoting their own mental well-being. Clearly, employee PHS is an increasingly important consideration across organizations and workplaces, particularly throughout periods of uncertainty and shifting public health considerations.

3 Psychological Health and Safety During COVID-19

In this report, we examined the literature on supports available to promote employees' PHS, which included supports at both the employee-level and the system-level. Phase I focused on the employer response to COVID-19 and identified how many organizations typically focused on services directed toward employees (i.e., employee-level supports) in response to distress. These services or supports are primarily beneficial to employees who proactively seek them out. Conversely, we found that employers' efforts notably lacked system-level supports, which include workplace-wide structural supports that can benefit all employees. System-level supports benefit all employees regardless of distress levels and are largely preventative. These supports do not rely on employees actively accessing available services to benefit, which is important given the well-known barriers to accessing psychological supports [15]. Throughout this review we provide additional insights within the context of these two types of support.

Studies have repeatedly demonstrated how the COVID-19 pandemic significantly impacted mental health [16]. Studies from Canada and worldwide showed a greater prevalence of mental illness symptoms such as distress, depression, anxiety, drug and alcohol abuse, stress, insomnia, PTSD, burnout, and fatigue during the pandemic [17,18]. One Canadian study found that anxiety rates quadrupled (from 5% to 20%) and depression more than doubled (from 4% to 10%) since the onset of COVID-19 [19]. Other research estimated that the rates of depression, anxiety, and stress increased between two and eight times the reported pre-pandemic rates [20]. Longitudinal studies suggest that mental health problems peaked worldwide in April and May 2020. Although symptoms of anxiety and depression decreased later in the pandemic, symptoms of other mental illnesses persisted, including substance use, PTSD, and psychological distress [21].

As the pandemic progressed, issues that became a greater focus included grief/bereavement, domestic violence, loneliness, and sleep problems [22].

Several studies indicate that frontline workers, particularly health care workers, were especially at risk for mental illness symptoms during the pandemic [17,18,20,23]. Between 25% and 50% of frontline health care workers reported symptoms of mental illness, including insomnia, anxiety, depression, and stress [24-26]. Other studies showed that mental health in women, visible minorities, racialized groups, and immigrants were particularly impacted during the pandemic. Individuals who identified as belonging to one of more of these groups were more likely to be public-facing workers, experience job insecurity, exposed to discrimination or stigma, and experience greater degrees of isolation [27-32].

Burnout was another commonly examined mental harm during the pandemic, especially among health care workers. In a meta-analysis of 5,022 participants, researchers showed that nearly half of the respondents reported moderate levels of emotional exhaustion and depersonalization (subscales of burnout), and more than half reported severe levels of diminished professional accomplishments [33]. Further, in the Canadian Medical Association's 2021 national physician health survey of over 4,000 physicians and medical trainees, 53% reported high levels of burnout during the pandemic compared to 30% in 2017 [34]. This survey also reported that 46% of participants considered reducing their clinical work over the next two years and 47% reported low social well-being compared to 29% in 2017.

A study of 2,707 health care workers from 60 countries showed that burnout was significantly associated with concerns about the health and safety of their families, feeling pushed beyond training, constant exposure to the virus, and facing ethical dilemmas at work [35]. In a Canadian study, researchers found that concern and risk exposure to the virus, a lack of personal protective equipment (PPE), and a lack of organizational support were related to higher rates of burnout in health care workers [36]. Additionally, researchers found a significant association between burnout and intention to leave their positions among 1,148 primary health care workers in China [37].

PHS is related to mental harms (or mental illness), and mental health (or well-being). Well-being has been captured using measurements of flourishing, resilience, optimism, making meaning, post-traumatic growth, and quality of life. Relative to mental harms, fewer studies examined well-being or flourishing during the pandemic [20]. Some studies indicated that the pandemic significantly lowered quality of life [38,39]. However, others reported that the prevalence of well-being was higher than that of mental illness, suggesting potential resiliency or protective factors [20]. Due to a tendency for this research to focus on harm not health, employees and employers may not be taking full advantage of such protective factors.

3.1 Employee-Level Supports

Workplaces may provide a range of employee-level supports for PHS that can be considered protective factors. These supports are typically designed for each employee to access at their discretion (e.g., an Employee and Family Assistance Program [EFAP]). Mental health interventions such as extended benefits for psychological therapies or EFAPs offer such employee-level supports. Many studies demonstrate that psychological therapies are effective interventions for mental illness [40-42]. However, employees face several limitations when using these resources, including the time commitment, associated expenses, and low rate of uptake [43]. Additionally, numerous barriers remain to seeking care [44-46] such as wait times, time off from work required to use these services, and stigma associated with seeking help, many of which persisted and were often exacerbated during the pandemic. A recent survey conducted by the Canadian Psychological Association and the Mental Health Commission of Canada showed that a lack of funding for private services was listed as a major barrier to accessing mental health services among Canadian employees [15]. As such, there is increasing interest in employers offering mental health resources across various formats [22]. For instance, several studies have examined the efficacy of these employee-level interventions, including peer support models [47], group models [48], internet-based/virtual support [49], mobile-based support [50], virtual reality [51], and digital learning platforms [52]. These non-traditional means include delivering traditional mental health interventions such as Cognitive Behavioural Therapy [53] and new

interventions such as embedded resiliency coaching [54] to support mental health. Although only a small subset of these studies demonstrated the programs' significant impact on employee mental health, initial research indicates these are viable ways to offer additional mental health support [22]. Informational support, including webinars, increased communication, and training when appropriate (e.g., training of new infection control procedures [55]) may also be considered employee-level interventions and are often implemented to improve workers' mental health [49,55-57]. Additionally, employee satisfaction with employer communication was significantly associated with lower burnout and stress in health care workers during the pandemic [58].

A focus on prevention, particularly building engagement and resilience among employees, is a powerful way to positively impact PHS in the workplace. Workers who identified as team members were 2.6 times more likely to be fully engaged and 2.7 times more likely to be highly resilient than those who did not. For millennia, humans have experienced improved psychological well-being only when they felt connected to and supported by trusted social connections [16]. Effective psychological resiliency prevention programs mitigate the risk of mental harm by providing workers with insights, tools, and support to create prosocial habits and improve coping skills [59]. These programs leverage a cognitive behavioural approach to provide workers with insights and support to practice and develop their psychological resiliency.

3.2 System-Level Supports

System-level supports are designed to foster work environments that reduce risk factors and promote protective factors for mental health, consistent with CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2022), *Psychological health and safety in the workplace* [2]. System-level supports can prevent the development of issues rather than respond after their emergence. For example, system-level interventions such as management of work hours, reducing workload, and modifying working conditions can significantly impact burnout rates and overall mental health in health care workers [60-63]. System-level supports have better uptake in the workplace because they do not target individuals "in need" or "at risk" and may be less stigmatized; instead, they are designed to support all

workers. Despite increasing calls to address system-level challenges during the pandemic [64-66], most research has focused on individual-level interventions.

Protection of physical safety. Physical safety, access to PPE, and infection control procedures/protocols were the most widespread system-level supports examined during the pandemic. Adequate access PPE was strongly associated with fewer symptoms of mental illness across numerous studies [35,39,67-72], as was the implementation of infection control procedures/protocols [39,68,70,73]. This effect was demonstrated in frontline workers, including health care workers [36,58,74] and non-frontline workers [73,75-77]. The relationship between adequate access to PPE and implementation of infection-control procedures/protocols and fewer mental illness symptoms was identified early in the pandemic and re-emerged with return-to-office requirements [75]. Therefore, adequate access to PPE and transparent, well-communicated infection control procedures can impact employees' psychosocial experiences during the pandemic.

Remote work. Remote work was also a prevalent issue facing workplaces during the pandemic. Studies that examined remote work show that it can have both positive [78-81] and negative impacts [82-85] on employees, including mental illness symptoms, overall well-being, job satisfaction, productivity, and perceptions of work-life balance [86]. The effects of remote work were varied and dependent on several variables, including sex, age, number of dependents at home, pre-existing mental illness symptoms, access to technology, and the availability of dedicated workspace at home [86-90]. Furthermore, occasional telework is associated with higher job satisfaction and better perceived work-life balance compared to exclusively teleworking [91].

Isolation and loneliness are concerns related to remote work. For instance, a review paper published in *The Lancet* indicates that employers should pay attention to isolation and loneliness. This paper examined the effects of quarantine and isolation in previous epidemics such as SARS, H1N1, and Ebola and reported that quarantine, even those as short as 10 days, was related to psychiatric symptoms up to three years later [92]. However, other workplace factors can mitigate the negative impacts of remote work on employees. For instance, remote work positively impacts employee

well-being when employee relations and trust are high [93]. In a sample of 1,055 university staff and 925 university students, researchers found that remote work significantly increased presenteeism and absenteeism, but only when it was associated with higher levels of social isolation [94]. The quality of leadership and social support from colleagues also influenced whether remote work adversely impacted a sample of 623 office workers in the United Kingdom [90].

Organizational support. Several studies indicate that perceptions of low employer support were predictors of employees' mental illness symptoms during the pandemic [36,69,72]. Researchers found that staff input, quality of leadership, and teamwork impacted health care providers' mental illness symptoms [95]. Low trust in an organization or leadership is also associated with mental illness symptoms and overall well-being [96].

Workload management. Although often highlighted in workplace recommendations [66,97,98], fewer studies have examined the impact of workload management on employee mental illness and health. Workload management includes both the quantity of work and the extent to which the workplace is pressured, chaotic, or conflict ridden. One study found that assuring leave time (e.g., medical, self-care, or family time) was associated with lower distress and anxiety [70]. Redeployment and/or insufficient training also significantly contributes to mental illness symptoms [68,69].

Similar themes emerged in Phase I of this research, which examined the employer perspective. Respondents indicated that primary psychosocial factors of concern included workload management, protection of physical safety, organizational culture, psychological support, and work-life balance. Consistent with the literature, Phase I research suggested that many organizations focused primarily on employee-level supports. In contrast, system-level supports had not progressed to the same extent. These findings highlighted the need to focus on both levels of support in the current study.

3.3 Inclusion in the Workplace

There is increasing awareness and interest in diversifying the Canadian workforce. This interest is bolstered by numerous studies that demonstrate how a diverse workforce can improve employees' outcomes. For instance, a diverse workforce can lead to several positive outcomes such as increased workgroup

effectiveness [99], organizational effectiveness [100], employee productivity, and job satisfaction [101]. In 2019, McKinsey & Company found that companies ranking in the top quartile of executive team gender diversity were 25% more likely to experience above-average profitability than peer companies in the fourth quartile [102]. They concluded that there is a 48% performance differential between the most and the least gender-diverse companies.

An estimated 22.3% of the Canadian population is a visible minority and this percentage is expected to increase over time [103]. Visible minority is one of many types of diversity. Other types of diversity include gender, age, sexual orientation, neurodiversity, and physical and mental illness. Given the diverse Canadian population, the Canadian workforce should reflect this diversity. Canadian workforce surveys indicate that while it is diverse, the diversity is not equally distributed across workforce roles. For example, senior leadership positions do not reflect the Canadian population's diversity [104].

Notably, many diversity studies focus on a narrow definition of diversity, often solely on gender or ethnic/racial diversity. However, visible and invisible diversity come in many forms, including sexual orientation and neurodiversity. We must recognize the many types of diversity among employees and ensure that best practices for inclusion are in place to support our diverse workforce. Inclusion can be defined as when "people of all identities can be fully themselves while also contributing to the larger collective, as valued and full members" [105, p. 235]. Research shows that inclusion is associated with an increased sense of belonging, health, and extended lifespan [106]. In contrast, exclusion can negatively affect physical health (e.g., substance use, unhealthy food selection, and diminished cardiovascular health) and psychological health (e.g., stress and strain, anger, and irritability [107]). Although inclusion and diversity are intimately connected, a diverse workforce does not necessarily equal an inclusive one and it cannot be measured simply by examining employees' demographics within an organization or reaching a pre-defined quota. Furthermore, if only some aspects of diversity (e.g., ethnicity) are prioritized, other central aspects of diversity may be excluded. Focusing solely on enhancing visible forms of diversity can also contribute to a sense of exclusion by individuals in the workforce who may not exhibit visible forms of diversity.



“We must recognize the many types of diversity among employees and ensure that best practices for inclusion are in place to support our diverse workforce.”

Inclusion is a key contributor to PHS in the workplace. Furthermore, CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2022) highlights the importance of continuous improvement and monitoring aspects of PHS systematically [7]. A PDCA model of continuous improvement is critical to ensuring that an employer's actions are having the desired impact on employees' experiences. However, this model is only possible when key outcomes are measured. Few well-developed, validated tools measure inclusion in the workplace. Furthermore, existing inclusion questionnaires suffer from several issues and very few of these questionnaires have established the reliability and validity of their measures [108]. Several questionnaires focus on narrow definitions of diversity (e.g., only neurodivergence or visible minority status; [109]) or measure attitudes toward inclusion and require the completion of lengthy surveys [110]. Without well-validated measures that effectively capture inclusion in the workplace, it is challenging to assess this important aspect of PHS. Phase I of this research highlighted employers' struggle to engage in continuous improvement practices and a need to adopt an inclusive lens when considering the employee experience. Therefore, in this study we aimed to implement a new measure of inclusivity that employers can use to collect meaningful data and engage in continuous improvement practices.

4 Methods

This study involved a mixed-method design asking a varied sample of the Canadian workforce to complete a series of quantitative and qualitative questions to understand their experience regarding workplace

mental health following the peak of the COVID-19 pandemic. This survey's questions concerned psychosocial factors and hazards that employees have experienced in their work. The survey is included in Appendix A. Additionally, participants were asked to share their opinions on the implementation and effectiveness of common organizational policies and practices. We collected information regarding participants' work settings, absenteeism, concerns, and levels of social isolation and loneliness. This survey also measured participants' self-reported categorization of diversity and their perceptions of inclusivity within their organization post-pandemic. The qualitative questions asked participants to share their opinions on the most significant initiatives, biggest gaps, and unmet needs within their organizations.

The survey was available from June 20, 2022, to November 1, 2022. The final sample consisted of 1,413 Canadian employees. The survey was open to participants to complete in either English or French; approximately 10% of participants completed the survey in French. Participants were recruited through the Canadian Standards Association's (CSA Group) members' mailing lists, the Canadian Union of Public Employees' (CUPE) mailing list, and via paid recruitment platforms, social media, targeted contacts, convenience, and snowball sampling. Three attention-check items (e.g., "Please select 'strongly agree' for this item") ensured a higher quality of responses. Participants who failed to respond correctly to any of these attention-check items were removed from the analysis. This research study received ethics clearance from Saint Mary's University's Institutional Research Ethics Board (SMU REB #21-053).

5 Results and Discussion

5.1 Sample Characteristics

As presented in Appendix B, the most common sector reported in our sample was health care (16%), followed by transportation (12%), retail (7%), manufacturing (6%), and finance and insurance (6%). Most participants worked in private corporations (55.2%), followed by public corporations (17%), provincial governments (11.4%), and non-profit organizations (7.1%). Nearly half the participants worked in an organization of fewer than 500 employees (43.4%) and 34% reported being a union member (410 out of 418 were CUPE members). The survey results showed that 55.1% of participants were frontline workers and 37.3% were in supervisory roles. Most participants worked full-time (82.4%). Participants were equally distributed in terms of their tenure: 55.3% had between one and ten years of work experience. About half of participants (53.8%) earned less than \$60k a year, 29.4% \$60k to \$100k a year, and 12.7% \$100k or over per year (all salaries Canadian). Most participants were from Ontario (40.2%), followed by British Columbia (14.1%), Quebec (12%), and Alberta (11.3%), and they lived primarily in an urban area (78.1%). Results showed that 46.7% had a bachelor's degree or higher (master's, MD, DDS, PhD), most were married or common law (60.4%), 42.9% were aged 31 to 45, and 75.4% were aged 26 to 55. A complete overview of demographic information is included in appendices B-1 to B-13.

This study successfully recruited a relatively diverse sample of respondents, including 861 female-identified (60.9%), 531 male-identified (37.6%), 7 non-binary (0.5%), and 5 gender variant/non-conforming (0.4%) participants. Visible minorities made up 22.7% of our sample (321 visible minorities and 1,092 Caucasian respondents). Regarding our sample's neurodiversity, 346 participants (24.5%) self-reported as neurodivergent. Finally, 1,215 participants (86%) identified as heterosexual, 5.8% as bisexual, and 4.7% as gay or lesbian. An overview of survey respondent diversity is provided in appendices B-14 to B-17.

5.2 Practices, Policies, and Programs Offered by Organizations

In this study, we examined employees' awareness of practices, policies, and programs offered by organizations since the beginning of COVID-19 to

support their PHS and/or mitigate the pandemic's negative impact on PHS (see Table 1). Employees reported the highest level of awareness around regular communications (69.9%), EFAP (67.3%), adjusted work-from-home policies (60.1%), adjusted sick time policies (55.5%), and educational webinars (55.3%). Participants reported low degrees of awareness of a buddy system (25.9%), resiliency training (30.7%), caregiver support (31.7%), pulse checks (32.4%), and suicide prevention training for managers (33.1%).

In Phase I, employers reported that the most common initiatives supported through COVID-19 were daily communications (86.5%), adjusting work-from-home policies (84.8%), upgrading technology (77.8%), and EFAP (75.6%). This indicates some overlap in employers' most common initiatives and the programs with the highest employee awareness. However, despite the highest level of awareness of organizations' programs and policies among employees, this left 30% of staff *unaware* of these practices.

Participants were asked to indicate the level of positive impact of each program/policy on a scale from one to seven. From the employees' point of view, an adjusted work-from-home policy (with an average rating of 5.12), received the highest impact rating among policies. The next most positive program ratings were for adjusted flexible worktime policies (rating = 5.08), regular communications (rating = 4.90), upgraded technology (rating = 4.87), and adjusted sick time policies (rating = 4.81). In Phase I, the least-commonly offered programs tended to have the highest user rates, such as accessing CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2022) (66.8%), CBT (70.3%), peer support programs (66.7%), paramedical psychological services (62.9%), and surveys to benchmark employee experience (83.8%). EFAP also had a high evaluation rate (66.2%) but tended to rely on usage data retrieved from third-party providers. This research offers a glimpse into understanding the impact of programs and policies on employees. These data provide essential information that should be used to decide what programs are beneficial to employees and where to allocate funding.

5.3 Psychosocial Factors

The top five psychosocial factors that concerned employees since the beginning of the COVID-19 pandemic were work-life balance (17.5%), protection of

Table 1: Awareness and impact of practices, policies, or programs offered by organizations since COVID-19 outbreak

Programs & Policies	Aware	Aware but did not use	Used During Pandemic	Used Before Pandemic	Used Before & During Pandemic	Unsure	Average Impact Score
Regular communications (e.g., daily organizational huddles, email, intranet)	69.9%	13.5%	19.3%	6.5%	26.0%	4.6%	4.9
Employee and family assistance program (EFAP)	67.3%	34.1%	10.7%	5.9%	12.0%	4.6%	4.7
Adjusted work-from-home policy	60.1%	16.3%	26.2%	4.0%	7.4%	6.3%	5.1
Adjusted sick time policy	55.5%	20.1%	15.6%	4.7%	8.7%	6.4%	4.8
Educational webinars on various topics	55.3%	19.3%	17.0%	4.1%	9.9%	5.0%	4.6
Adjusted flexible worktime policy	52.5%	13.9%	16.2%	3.6%	12.4%	6.3%	5.1
Facilitate social connections (e.g., employee-manager and team check ins, social activities)	50.8%	11.9%	13.4%	6.4%	14.2%	5.0%	4.8
Upgraded technology: stable and secure video conference platform	48.0%	9.4%	18.8%	3.5%	10.9%	5.4%	4.9
Promote local community resources (e.g., suicide, domestic violence shelters, wellness together)	43.7%	22.7%	5.3%	3.7%	6.3%	5.8%	4.6
Leaders trained in how to support employee at risk for mental health concerns in workplace	43.6%	16.0%	8.5%	3.7%	6.7%	8.7%	4.4
Digital mental health applications APPs	43.3%	20.9%	7.9%	4.2%	4.3%	6.1%	4.5
Cognitive behavioural therapy (CBT)	41.2%	19.5%	6.9%	4.5%	4.5%	6.0%	4.6
Workplace survey designed to obtain employees’ perceptions and mental health benchmark	40.4%	11.1%	11.3%	4.1%	8.2%	5.8%	4.4
Peer support program	39.6%	19.1%	5.7%	3.7%	5.3%	5.7%	4.5
Adopt or adapt the CSA psychological health and safety “Standard”	38.0%	12.4%	7.1%	3.2%	5.2%	10.1%	4.5
On-demand resources (e.g., educational resources)	36.1%	14.9%	6.0%	3.5%	5.0%	6.7%	4.5
Paramedical psychological services	34.0%	15.4%	4.2%	3.3%	4.5%	6.5%	4.5
Leaders trained in how to be a psychological safe leader	33.6%	12.1%	5.3%	3.4%	5.9%	7.0%	4.3
Suicide prevention training for managers	33.1%	13.9%	3.7%	3.5%	4.8%	7.2%	4.5
Pulse checks to monitor employees’ experience	32.4%	9.8%	6.8%	3.5%	6.2%	6.1%	4.3
Caregiver support	31.7%	13.6%	5.1%	2.6%	2.9%	7.6%	4.3
Resiliency training	30.7%	10.4%	6.3%	3.4%	4.4%	6.3%	4.3
Buddy system	25.9%	7.9%	5.6%	3.2%	3.3%	6.0%	4.3

physical safety (11.3%), workload management (9.8%), civility and respect (7.3%), and psychological support (6.9%) (see Table 2). Based on Phase I's findings, these priorities are aligned with those of employers [1]. Employees and employers both reported work-life balance, workload management, protection of physical safety, and psychological support within their top five psychosocial factors of concern.

Overall, 28.3% of employees reported that their organization had taken little to no action and did not care about psychosocial factors at work; 18.9% believed their employer had taken no action but cared about psychosocial factors; 24.3% believed their employer implemented minor actions to address psychosocial factors; and 19.5% believed their organization fully implemented a plan that significantly addressed psychosocial factors (see Table 3).

5.4 Psychosocial Hazards

The top five psychosocial hazards that concerned employees were burnout (19.8%), anxiety (18.3%), stress (13.2%), fatigue (9.6%), and fear of the unknown

(8.9%) since the beginning of the COVID-19 pandemic (see Table 4). These findings align with Phase I of this study, which demonstrated that 40% of employers are concerned about burnout and stress within their work environment [1].

Compared to organizational plans to address psychosocial factors, employees rated their organizations lower in their level of action to mitigate or address psychosocial hazards of most concern. We found that 34.7% of employees indicated that their organization had taken no action and did not care about these psychosocial hazards; 22.2% thought their employer had taken no action but cared about these psychosocial hazards; 18.9% believed their employer implemented minor actions to address psychosocial hazards; and 12.9% believed their organization fully implemented a plan that significantly addressed psychosocial hazards (see Table 5). We present a comprehensive summary of employers' (Phase I) and employees' (Phase II) perspectives across psychosocial factors and hazards in addition to the level of action taken by organizations to address these concerns in Table 6.

Table 2: Psychosocial factors employees were concerned about since COVID-19 pandemic

Psychosocial Factors	First Priority	Second Priority	Cumulative Percent
Work/life balance	19.4%	15.5%	17.5%
Protection of physical safety	14.7%	7.8%	11.3%
Workload management	10%	9.5%	9.8%
Civility and respect	8.8%	5.8%	7.3%
Psychological support	6%	7.7%	6.9%
Cumulative exposure to critical or stressful events	7.1%	5.7%	6.4%
Clear leadership and expectations	4.9%	6.9%	5.9%
Psychological job demands	5.2%	6.1%	5.7%
Growth and development	4.3%	6.9%	5.6%
Recognition and reward	3.2%	7.5%	5.4%
Organizational culture	3.2%	7.1%	5.2%
Isolation (working remotely)	4.6%	4.7%	4.7%
Psychological protection from violence, bullying, and harassment	4.5%	3.8%	4.2%
Engagement	3.2%	3%	3.1%
Involvement and influence	0.9%	2%	1.5%

Table 3: Organizations' level of action to address psychosocial factors rated by employees

Level of Action Addressing Psychosocial Factors	First Choice	Second Choice	Cumulative Percent
Little to no action, and they don't care about this factor	27.2%	29.3%	28.3%
Little to no action, but it seems they care about this factor	17.4%	20.3%	18.9%
They have implemented minor actions	26.6%	22%	24.3%
They fully implemented a plan that significantly addresses this factor	20.3%	18.6%	19.5%
Not sure	8.5%	9.8%	9.2%

Table 4: Psychosocial hazards employees were concerned about since COVID-19 pandemic

Psychological Hazards	First Choice	Second Choice	Cumulative Percent
Burnout	22.4%	17.1%	19.8%
Anxiety	23.6%	13%	18.3%
Stress (i.e., distress)	11.2%	15.2%	13.2%
Fatigue	7%	12.1%	9.6%
Fear of the unknown	10.2%	7.6%	8.9%
Overwhelmed	4.8%	8.6%	6.7%
Loneliness	4.6%	4.9%	4.8%
Compassion fatigue	3.6%	5.1%	4.4%
Incivility (i.e., rudeness)	2.7%	3.8%	3.3%
Distraction	2.1%	2.5%	2.3%
Confusion	2%	2.4%	2.2%
Anger	2.3%	1.7%	2.0%
Irritability	1.2%	2.5%	1.9%
Cognitive errors	0.8%	1.4%	1.1%
Substance use	0.7%	1.2%	1.0%
Suicidal ideation	0.8%	0.9%	0.9%

Table 5: Organizations' level of action to address psychosocial hazards rated by employees

Level of Action Addressing Psychosocial Factors	First Choice	Second Choice	Cumulative Percent
Little to no action, and they don't care about this factor	34.4%	34.9%	34.7%
Little to no action, but it seems they care about this factor	22.5%	21.8%	22.2%
They have implemented minor actions	19.2%	18.6%	18.9%
They fully implemented a plan that significantly addresses this factor	12.8%	12.9%	12.9%
Not sure	11.1%	11.8%	11.5%

Table 6: Summary of key comparisons between employers' and employees' perspectives

Key Comparisons	Employers' Perspective [1] (Phase I)	Employees' Perspective (Phase II)
Top 5 Psychosocial Factors	<ol style="list-style-type: none"> 1. Workload management (12.1%) 2. Protection of physical safety (10.7%) 3. Organizational culture (9.8%) 4. Psychological support (9.8%) 5. Work/life balance (8.9%) 	<ol style="list-style-type: none"> 1. Work/life balance (17.4%) 2. Protection of physical safety (11.2%) 3. Workload management (9.7%) 4. Civility and respect (7.3%) 5. Psychological support (6.8%)
Reported Progress on Psychosocial Factors	<ul style="list-style-type: none"> ▪ Little to no action (36.1%) ▪ Implemented minor actions (22.3%) ▪ Full implementation (39%) ▪ Not sure (2.6%) 	<ul style="list-style-type: none"> ▪ Little to no action (47.1%) ▪ Implemented minor actions (24.3%) ▪ Full implementation (19.4%) ▪ Not sure (9.1%)
Top 5 Psychosocial Hazards	<ol style="list-style-type: none"> 1. Burnout (20.9%) 2. Stress (19.3%) 3. Anxiety (12.9%) 4. Overwhelmed (8.9%) 5. Fatigue (8.2%) 	<ol style="list-style-type: none"> 1. Burnout (19.7%) 2. Anxiety (18.3%) 3. Stress (13.2%) 4. Fatigue (9.5%) 5. Fear of the unknown (8.9%)
Reported Progress on Psychosocial Hazards	<ul style="list-style-type: none"> ▪ Little to no action (47.5%) ▪ Implemented minor actions (23.5%) ▪ Full implementation (24.9%) ▪ Not sure (4.2%) 	<ul style="list-style-type: none"> ▪ Little to no action (56.8%) ▪ Implemented minor actions (18.9%) ▪ Full implementation (12.8%) ▪ Not sure (11.4%)

5.5 Inclusivity and Intersectionality

We developed a scale to measure Inclusion in the Workplace, which asked participants to rate their perceptions of feeling welcomed and respected in the workplace. The responses were scored, and participants were categorized into low-, medium-, or high-inclusivity groups. To complete scoring and grouping, we examined the distribution of inclusion scores across the entire sample. We then selected two thresholds that would allow us to divide the sample into three relatively equal categories. Out of a total score of 10, a score of 4.99 or below was categorized into the low inclusion group, a score of 5.00 through 7.99 was categorized into the medium group, and a score of 8.00 and above was categorized into the high-inclusivity group. Following this grouping scheme, 298 participants (21.2%) were

categorized as experiencing low inclusivity, 639 (45.5%) experienced medium inclusivity, and 467 (33.3%) experienced high inclusivity.

Intersectionality is a concept that describes individuals' "intersecting" and "overlapping" types of diversity based on social, cultural, and political identities [111]. To better understand our sample's unique diversity and experiences, we conducted an intersectionality analysis based on participant's self-identified social categorizations, including gender, ethnicity, neurodiversity, and sexual orientation. We examined all 16 possible combinations of gender, ethnicity, neurodiversity, and sexual orientation. Sample sizes within each group are shown in Table 7. This analysis highlights how employees can have both visible and invisible forms of diversity.

Table 7: Results of intersectionality analysis

Attributions				Sample Size
Gender	Ethnicity	Neurodiversity	Sexual Orientation	
Male	Non-visible Minority	Non-neurodivergent	Heterosexual	248
Male	Non-visible Minority	Non-neurodivergent	Non-heterosexual	41
Male	Non-visible Minority	Neurodivergent	Heterosexual	63
Male	Non-visible Minority	Neurodivergent	Non-heterosexual	21
Male	Visible Minority	Non-neurodivergent	Heterosexual	108
Male	Visible Minority	Non-neurodivergent	Non-heterosexual	16
Male	Visible Minority	Neurodivergent	Heterosexual	23
Male	Visible Minority	Neurodivergent	Non-heterosexual	5
Female	Non-visible Minority	Non-neurodivergent	Heterosexual	493
Female	Non-visible Minority	Non-neurodivergent	Non-heterosexual	35
Female	Non-visible Minority	Neurodivergent	Heterosexual	136
Female	Non-visible Minority	Neurodivergent	Non-heterosexual	37
Female	Visible Minority	Non-neurodivergent	Heterosexual	106
Female	Visible Minority	Non-neurodivergent	Non-heterosexual	11
Female	Visible Minority	Neurodivergent	Heterosexual	27
Female	Visible Minority	Neurodivergent	Non-heterosexual	13



“The top barrier for employees within the medium- and high-inclusivity groups was their preference for dealing with issues on their own.”

Inclusivity scores provide a means to understand employee experiences across many important workplace variables. For instance, respondents who work in a low-inclusivity workplace reported experiencing higher levels of misunderstanding, incivility, unresolved conflict, psychological bullying, discrimination, harassment, and prejudice (Table 8). Within our sample, participants who experienced low inclusivity also reported greater rates of short- and long-term leave (Table 9). Employees who experienced low inclusivity in the workplace also took more disability leave compared to employees who experienced high inclusivity within their work environment. Additionally, participants rated their concern regarding the social determinants of health. Employees who worked in a low-inclusivity environment were more concerned about their finances, housing, food, job security, physical and mental health, and psychological safety (Table 10). By comparing the low- and high-inclusivity groups, the biggest gap in social determinants of health was with respect to employees' level of psychological safety (i.e., concerns about being judged, bullied, or harassed at work).

Moreover, barriers to seeking professional mental health support were different for employees who worked in low-inclusivity environments (Table 11). The top five barriers to employees within the low-inclusivity category were: (1) shortage of accessible mental health professionals; (2) lack of confidence in the health care system; (3) long wait times for care; (4) cost of services

not covered by private insurance; and (5) difficulty navigating mental health and addiction systems. The top barrier for employees within the medium- and high-inclusivity groups was their preference for dealing with issues on their own. Overall barrier ratings were higher for the low-inclusivity category than the medium- and high-inclusivity groups.

5.6 Qualitative Results

Respondents were asked to describe in open-field text boxes the most significant impact, biggest gap, and needed initiatives moving forward regarding employee PHS during COVID-19. The first author reviewed and coded these qualitative data to analyze significant themes that emerged across responses. The percentages listed represent the proportion of responses included within a given theme and these categories are not mutually exclusive. Table 12 provides a complete summary of qualitative themes. We have included sample respondent comments within each category.

5.6.1 Most Significant Impact

Respondents were asked to indicate the initiative (e.g., priorities, practices, policies, programs, innovations) provided by their organization with the biggest impact on employees' PHS during the COVID-19 pandemic. The most common responses were safety protocols (19% of 1,089 responses), mental health (10%), remote work (17%), and nothing (17%).

Table 8: Inclusivity impact analysis: Level of experienced and/or observed negative behaviours at work

Experienced and/or Observed	Low Inclusivity	Medium Inclusivity	High Inclusivity
Misunderstanding	95.6%	79.6%	63.9%
Moments of conflict	94.9%	78.7%	54.6%
Rudeness or incivility	93.6%	72.5%	46.4%
Ongoing or unresolved conflict	88.7%	65.3%	36.2%
Covert psychological bullying	81.1%	46.4%	23.8%
Bias or prejudice	77.3%	52.2%	23.8%
Overt psychological bullying	74.7%	39.1%	19.6%
Harassment	72.1%	41.6%	19.5%
Discrimination	66.4%	40.8%	18.8%
Racism	46.1%	35.1%	17.2%

Table 9: Inclusivity impact analysis: Leave of absence taken by employees

Leave of Absence	Low Inclusivity	Medium Inclusivity	High Inclusivity
Short-term Leave	49%	42.4%	35.2%
Long-term Leave	17.6%	15.8%	15.1%
Disability Leave	14.1%	13.4%	7.8%

Table 10: Inclusivity impact analysis: Social determinants of health

Social Determinants of Health	Full Sample	Experienced Inclusivity			Difference between low and high inclusivity group
		Low Inclusivity	Medium Inclusivity	High Inclusivity	
Psychological safety – concerned about being judged, bullied, or harassed at work	3.0	4.6	3.1	1.8	2.7
Mental health – challenged by mental health or mental illness	3.9	5.1	4.1	3.0	2.1
Job security – uncertainty about having or keeping job	3.7	4.5	3.9	2.9	1.5
Financial stability – anxious about money	4.8	5.5	4.9	4.1	1.4
Physical health – challenged because of physical health issues (e.g., obesity)	3.6	4.3	3.8	2.9	1.3
Food security – availability of sufficient, safe, and nutritious food	3.6	4.3	3.6	3.0	1.3
Housing stability – affordable housing	4.3	4.9	4.4	3.9	1.0

Table 11: Inclusivity impact analysis: Barriers to seeking professional mental health support

Barriers	Prevalence		
	Low Inclusivity	Medium Inclusivity	High Inclusivity
Shortage of accessible mental health professionals	3.3	2.7	2.2
Lack of confidence in the health care system	3.3	2.8	2.4
Long wait times	3.2	2.8	2.3
The cost of services not covered by private insurance plans	3.1	2.7	2.2
Difficulty navigating mental health and addiction systems	3.0	2.4	2.0
I prefer dealing with issues on my own	2.9	2.9	2.7
Not knowing where to go for help	2.8	2.4	2.0
Concern about colleagues or employers knowing that you are accessing mental health services	2.7	2.2	1.7
Concerns about stigma around mental health	2.7	2.3	1.8
Affordability, including lack of employment-based benefits or inability to pay out of pocket	2.6	2.4	1.9
Concern about implications for licensing or professional insurance	2.4	2.2	1.8
Lack of access where I live (e.g., rural or no youth services)	2.2	1.9	1.6
Culture or language barriers	1.8	1.7	1.6
Stigma about my gender asking for help	1.8	1.7	1.4
Racism or structural stigma	1.7	1.6	1.4

Responses were categorized as physical safety protocols included COVID-19 protocols such as masking, PPE, social distancing, working from home, and vaccine mandates. Although many respondents reported these protocols as positive initiatives that helped them feel physically safe in the workplace, some commented that the measures were too strict, particularly those concerning vaccine mandates. Some respondents indicated that their workplaces' failure to support or enforce safety protocols (particularly when dealing with the public) was a significant problem. For example, some comments described the lack of support for staff who were required to ask customers to wear masks indoors.

Safety protocols (19%):

- Everyone had to stay home if they get remotely sick. Provided rapid tests to take home. Made us fill out a COVID questionnaire every day. Made us wear masks. Made half of workforce work from home.
- I think the biggest policy was the vaccine mandate for all employees. This caused quite a bit of discussion and uncomfortable feelings for some who felt this was an invasion of privacy.
- Honestly, being vaccinated at the beginning was probably the best thing. It was well-organized and accessible.
- Making masks & vaccines mandatory. It made me feel like the company cared about my well-be

Many respondents discussed how remote work and hybrid work arrangements impacted their health and safety. They described these initiatives as offering more flexibility and the ability to deal with stressors at home and in the workplace. Some comments also described the disadvantages of remote work, including feelings of isolation or a lack of work-life balance. However, most reported that remote work was a positive impact and hoped it would continue post-pandemic.

Remote work (17%):

- Being able to work from home, get lots done without all the toxic workplace environment. I'm finding wherever you go these days there is an extreme unhealthy toxic environment and nobody does anything about it. It's very hurtful to productivity and revenue for companies.
- Allowing me to work from home reduced my stress and helped me save money. It was the best experience for me to be home, with my pets, using my own bathroom! Now that I'm back in the office there is more tension and drama, and I feel more disconnected in an office all alone. I wish I could work from home permanently, but my manager won't allow it.
- It's great that we were mandated to work from home, but I haven't felt or seen any initiatives that would support workers from home, expectations and workloads are much higher, free overtime is expected.
- Location of work – forced work from home for 2 years, followed by forced return to workplace before it was safe, followed by confusion over hybrid model.

A notable percentage of respondents indicated that their employers failed to enact initiatives to address mental health in the workplace during the pandemic. Many respondents could not think of or name any policy or initiative their employer established related to mental health.

Nothing (17%):

- I cannot think of any initiative besides the existing mental health program before the pandemic.
- N/A This is not a psychologically safe workplace; before, during, or after the pandemic, nor before, during, or after the work from home period.
- There was really no initiatives ... they didn't do anything to help us.

Mental health initiatives were described in 10% of the 1,089 responses. The mental health initiatives described included increased access or coverage for EFAP or private therapist/psychological services. Varied types of mental health support such as peer support, on-site counselling, embedded therapists, and support hotlines were described. Many respondents also highlighted that employees perceived more support or opportunity to discuss mental health topics or mental health concerns (e.g., weekly check ins, hotlines, employee phone support).

Mental health (10%):

- Specific mental health and wellness program with unlimited access and use for employees free of charge.
- They have doubled our benefits for getting counseling.
- They have worked hard at keeping everyone mentally aware and safe by having someone you could call. Meeting every week you attend to help deal with stress, one week would be yoga the next would be meditating.
- They began giving us access to mental health care and allowed us to take more sick days or leaves for our mental health.

5.6.2 Biggest Gap

Respondents were asked to identify the biggest gap that their employers failed to address regarding employees' PHS during the COVID-19 pandemic. The most common responses were related to communication and engagement (15% of the 1,111 responses included this theme), safety protocols (11%), mental health supports (9%), and workload (8%). Notably, 19% of the 1,111 respondents reported that no gap was unaddressed by their employers. Respondents also indicated that their employers supported them and that they appreciated their employers' efforts.

No gap (19%)

- I didn't personally see any gaps as my employer did their utter best to make sure we were all safe.
- No gaps here, my new employment is absolutely amazing!
- No gaps whatsoever. They have always been extremely supportive.
- Nothing I can think of. The employer was attentive to what the employees needed.

In 15% of the 1,111 responses, respondents indicated that communication, connection, check ins, and engagements were the biggest gap. These respondents often stated there was insufficient communication, so they were unaware of ongoing discussion and developing policies. They described feeling left out and that only select groups (e.g., the "inner circle") received updates and new information. Staff furloughed or laid off noted that they often felt abandoned as they received very little communication once they had been furloughed or reassigned. Some respondents that worked from home or remotely also felt disconnected or had little to no contact with their managers. These respondents also indicated that the lack of communication and engagement meant that decisions were made "for them" or "to them" rather than in collaboration with them. Respondents indicated they felt unheard and uncared for, and that decision-makers did not understand the realities of their jobs.

Communication and engagement (15%)

- Providing adequate check ins to make sure we were doing ok.
- More explanations as to why they are doing what they are doing.
- To much management making rules, with no communication to staff on all levels. Miscommunication mostly.
- Real meaningful communication with employees and actually caring for employees.

Some respondents highlighted a lack of safety protocols regarding COVID-19, sometimes related to a lack of PPE, policies, or enforcement. Some respondents also indicated that this included a failure to protect employees from bullying and harassment by customers or the public related to COVID-19 safety protocols.

Safety protocols (11%)

- Lack of PPE at the beginning and felt like no support.
- Management does not set an example and often do not wear masks.
- Our employer during work failed to properly enforce mask requirements leading to greater anxiety and worry among co workers.
- The public's ignorance that played on and hurt a lot of cashiers. Day in and day out there verbal and sometimes physical abuse to us was unreal.

5.6.3 Needed Initiatives

Respondents were asked what initiatives (e.g., policies, programs, practices) were needed from their employers to support employees' PHS. The most common responses related to mental health supports (26% of the 1,067 responses included this theme), communication and engagement (9%), and more sick time/time off (7%). Other frequent responses included that nothing was needed (16%), or unsure what was needed (11%).

Among the responses that touched on needing more mental health supports, respondents indicated that they required improvements in access to and awareness of mental health services. Respondents also indicated they needed more funding for private mental health services and improved EFAP programs. Their comments included a need for improved attitudes toward mental health, such as reducing the stigma of taking care of one's mental health or treating a "mental health day" the same as a sick day for a physical illness. They described wanting their leaders to treat mental health the way they treat physical health.

Mental health supports (26%)

- A clear policy that allows someone to go get assistance if required without worrying about the security of their job.
- A realization of how important mental health is. Knowing that responses taken have a huge affect. Protection of psychological well being should be acknowledged AND promoted as a top metric. We failed miserably in the last two years, this needs to be a high priority.
- Management that respects and treats mental health and addictions the same as other illness and sickness.

In 9% of the 1,067 responses, respondents described a need for more communication and engagement. This included the feeling that their leaders did not understand the realities of their job and that more communication and engagement with employees would improve PHS in the workplace. Employees wanted more regular check ins, more ability to describe their concerns, and to feel heard and understood. They noted that check ins made them feel cared for or that their employer recognized their stressors and tried to provide support. Employees also expressed the desire to have more open and authentic communications, discuss difficult topics, feel safe and heard in communications, and experience more team engagement.

Communication and engagement (9%)

- Regular check-ins from people who we can trust to give us some space to 'vent' our concerns.
- It would have been nice to have managers and an employer that cared about what we were doing and who checked on how we were feeling. Even some debriefing would have been nice. Or some mental health days.
- Taking issues seriously, and genuinely seeking feedback from workers on their experiences. Often, concerns are dismissed, or people are gas-lit. Then they learn to stay silent, and often seek a job elsewhere.
- They could start by asking us what we need.

Table 12: Summary of the most common themes within qualitative responses

Most significant impact (total number of responses = 1,089)	Biggest gap (total number of responses = 1,111)	Needed initiatives (total number of responses = 1,067)
Safety protocols (19%)	No gap (19%)	Mental health supports (26%)
Remote work (17%)	Communication and engagement (15%)	Nothing was needed (16%)
Nothing (17%)	Safety protocols (11%)	Unsure what was needed (11%)
Mental health (10%)	Mental health supports (9%)	Communication and engagement (9%)
—	Workload (8%)	More sick time/time off (7%)

In 7% of the 1,067 responses, respondents indicated the need for more sick time or time off. Respondents described that they often felt pressured by management not to take their sick time even when they were entitled to it. They wanted to use time off for family responsibilities, mental health needs, or self-care. They described feeling “questioned” and “punished” for using sick days or pressured not to use sick time.

Sick time/time off (7%)

- Revisit sick policy to include mental health days off.
- Proper rest times and policies to mitigate overwork and chronic fatigue.
- Taking us seriously that’s it, not that we are just trying to get out of shifts.
- Because burn out is so huge in our industry. Recognizing all efforts and supporting those who needed “mental health days” without judgement. Following up in a positive way with those employees that took time off to sort things out. Offer encouragement and support.

6 Discussion and Recommendations

This report summarizes the employee perspective regarding PHS in the workplace in response to the COVID-19 pandemic and is complementary to Phase I

of this research examining the employer perspective [1]. CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2022) *Psychological health and safety in the workplace* highlights the importance of continuously engaging employees and obtaining their feedback to protect and support their mental health [2]. Therefore, an understanding of the employee experience is critical to working toward a psychologically healthy and safe workplace.

PHS is achieved when both employees and employers are active contributors [7]. Employees can take actions such as engaging in activities to promote mental fitness. Employers can mitigate the impact of negative (e.g., draining) psychosocial factors that can harm employees’ mental health. Understanding the psychosocial factors of greatest concern for employees is an essential step in mitigating their potentially negative impact.

The comparison between employees’ perspectives in this research to employers’ perspectives from Phase I provides additional insights into what employees believe employers are doing well and what they can improve. Identifying discrepancies between employee and employer perceptions can provide beneficial information for how employers might better protect their employees from mental harm and promote mental health through PHS initiatives (e.g., policies, programs, and supports) in the workplace. The discrepancies noted in this report emphasize the issues and existing gaps. Each employer must engage in open dialogue with their employees to understand their needs and measure the impact of programs to mitigate psychosocial hazards.



“Employees and employers reported work-life balance, workload management, protection of physical safety, and psychological support within their top five psychosocial factors, although the order differed slightly.”

6.1 Ways to Improve Psychological Health and Safety in the Workplace

In Phase I, we highlighted the need for prevention and that many policies or programs were only made available in response to a problem or concern. By examining and implementing employee- and system-level supports, employers can broaden how they promote PHS in the workplace. Employers should not be solely dependent on employees seeking out employee-level supports, as we know that significant barriers exist to accessing these supports. Employers need also to implement system-level supports to improve all employees' experiences. This action works preventatively for all employees and provides a supportive environment for those experiencing challenges.

6.2 Employee-Level Supports

The impact of program and policies is severely limited if employees are unaware of the available resources. In this study, we found that employees were most aware of regular communications (e.g., daily organizational huddles, email, intranet), EFAP, adjusted work-from-home policies, adjusted sick time policies, and educational webinars. Employee programs and policies with the highest impact included adjusted work-from-home schedules, flexible worktime, sick time policies, regular communications, and upgraded technology. However, the qualitative data reflected the need for more mental health supports. Those supports included the desire for more funding for private services, more time off to use these private services, and an interest

in exploring alternative forms of support such as embedded workplace services or peer support. Furthermore, engagement was a repeated theme, with employees feeling that their employers often did not understand their needs and did not try to engage or communicate with them directly. This finding suggests that communication and engagement with employees are just as important (or potentially more important) as policies and programs. This aligns with the Canadian Human Rights Commissions recommendations for promoting open communication and clear dialogue during the COVID-19 pandemic [11, as in Section 2.1 on page 11]. Employers can benefit from this open discussion and from quantitative and qualitative data collection (e.g., listening tours) designed to learn from employees' psychological safety experiences.

6.3 System-Level Supports

Employers' and employees' share many similarities in their top concerns around psychosocial factors and hazards during the pandemic. Employees and employers reported work-life balance, workload management, protection of physical safety, and psychological support within their top five psychosocial factors, although the order differed slightly. Regarding psychosocial hazards, 51% of employees were concerned with burnout, anxiety, and stress compared to 40% of employers. This difference may be attributed to the timing of survey completion, or it could suggest that employers do not fully recognize the degree of burnout, stress, work demand, and challenges experienced by their workforces.

In the open-text responses, common themes emerged within the identified gaps and needed initiatives, including more thoughtful communication and engagement approaches, focus on psychological and physical safety protocols, and workload management. These topics are consistent with those identified within the literature (see Section 2.1). Although we identified some overlap in the most concerning psychosocial risk factors and hazards, a notable discrepancy existed between the progress made to mitigate risk as perceived by employers and the progress to mitigate risk as perceived by employees. Employees rated less progress toward addressing the psychosocial risk factors and hazards than did employers, suggesting that employers must further understand and consult with employees to mitigate risk more successfully.

Notably, several respondents indicated that they felt their employers had appropriately taken steps to support them during the pandemic, and they did not identify significant gaps. It is more likely that employees feel supported when their employers continually engage and communicate with them to learn about their needs and the effectiveness of policies and interventions that support PHS. These findings also suggest that employers who provide programs without engaging with or obtaining input from employees may be perceived as delivering arbitrary wellness initiatives that “check the box” or are assumed to be effective rather than truly accounting for employee well-being.

Notably, only 20% of respondents believed that their employers understood possible psychosocial risk factors and had taken meaningful action to mitigate harm. Twenty-seven percent reported that they believe their employers do not care about psychosocial risk factors or have a plan to mitigate harm and 17% believed their employers care but did not note any clear action to mitigate harm. Building on Phase I of this study, it is prudent that employers do not simply assume that their programs are having the intended impact. Employers should ensure that all initiatives are aligned with a PDCA approach, wherein the step to “check” requires examining whether the implemented plan is having the intended effect. This needs to be a key priority for employers to understand the psychosocial factors and hazards their staff face and whether the actions taken to promote PHS are indeed

effective. Following this step, employers must evaluate feedback and adjust their approach accordingly.

Employers who care about their workers' mental health and well-being should measure psychosocial risk factors as defined by the ISO 45003 standard [112], which outlines guidelines for managing psychosocial risks in the workplace. Employers should also develop programs and policies through a diversity, equity, and inclusion (DEI) lens to that all forms of diversity are considered. Adopting a PDCA approach to evaluating the impact of programs and policies on workers' mental health can promote and protect well-being and enrich the employee experience.

6.4 Inclusion in the Workplace

This study recruited a diverse sample across several visible and invisible forms of diversity. The intersectionality analyses highlighted that individuals exhibit multiple forms of diversity and that shifting the focus to ensuring reasonable inclusion is critical in the workplace. The inclusivity scale addressed aspects of belonging, feeling valued, and being respected.

The level of perceived inclusivity was associated with many workplace factors, from the proportion of employees who took disability leave to employees' experiences with harassment. Employees who reported low inclusivity in the workplace also reported more barriers to accessing services despite a desire to use such services. Employers must recognize that not all policies and programs are equally available to or similarly experienced across employees. Engagement with employees who identify with many forms of diversity is key to ensuring that programs and policies are available and impactful for all employees. In this study, the intersectional analysis also provided evidence of equity's importance regarding the employee experience. Equitable access to programs and feeling psychologically safe and welcome at work will only be achieved once employers recognize and accommodate individual experiences among their staff. This recognition and accommodation will ensure that all employees, regardless of role, title, age, gender, sexual orientation, and mental health, feel fully accepted and safe at work.

Perhaps the most significant finding was the relationship between psychological safety, inclusion, and employee experience regarding lost time. Employees must feel

psychologically safe for a workplace to be truly inclusive. Employers should consider the connections between intersectional diversity profiles, perceived levels of inclusion (e.g., degree to which employees feel safe, welcomed, and included), and lost time. Our findings indicate that there may be a connection between perceived inclusion levels and the risk of missing work due to illness or disability, however more research is required to further explore this possible link. These observations suggest that there is an opportunity to challenge employers to reflect on how they can effectively measure the effect of inclusion on the employee experience and avoid limiting steps to increase DEI initiatives to visible forms of diversity. Additional forms of invisible diversity, including sexual orientation, gender identity, and neurodivergence should be similarly protected under human rights legislation to have inclusive and psychologically safe workplaces. Advancing efforts to ensure a psychologically safe and inclusive environment must also extend to acknowledging perceived levels of inclusion within the workplace.

Respondents noted significant concern regarding social determinants of health, including job and financial security, which inhibit their capacity to invest in their mental health. Employers should be mindful of these ongoing stressors for employees and provide support to employees, which may include guidance on financial health and literacy. Furthermore, providing clear expectations on job security can meaningfully impact employees' sense of security and safety, particularly while public health factors may threaten the workforce. Finally, we found that the largest gap between low-inclusivity and high-inclusivity employee groups was in perceived psychological safety in the workplace. This finding emphasizes the importance of employers committing to regular employee feedback and ensuring that their DEI strategies are aligned with and contribute to workplace mental health and psychological safety initiatives across their workers.

6.5 Recommendations for Changes and Improvements for CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2022)

This study contributes to guidance for organizations such as CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2022) and the information provided by the Canadian Human Rights

Commission and the Centre for Occupational Health and Safety. Although these guidelines offer recommendations for actions, they do not often describe mechanisms for implementing change. This study provides one example that employers may use to better understand whether they are implementing recommendations and engaging in continuous improvement.

6.5.1 The Importance of Employee Engagement

A key theme that emerged across survey responses was the value of employee engagement. The most comprehensive program, policy, or practice will not have any impact if employees remain unaware of its existence. Furthermore, when employees believe their employer offers programs that do not reflect their needs or appear to simply “check the box,” these programs will not have the intended outcome. Ongoing employee engagement is critical to know whether messaging is being received and whether programs are effective. Employers should consider the barriers to accessing available programs beyond stigma such as inclusion, changing human behaviour, and privacy concerns that may inhibit employees from participating and engaging in employers' PHS initiatives prior to offering programs and policies.

One method for employers to implement is a focus on regularly defining key performance behaviours (KPBs) to protect and promote psychological safety and mental health. This approach would parallel efforts in OHS where specific and clear KPBs (e.g., daily hardhat use) are more common. Validated workplace employee experience KBPs include habits that positively impact employees' experience and mental health. These KBPs can be discovered in each workplace using a PDCA approach and by listening to employee feedback. An important role of workplace leadership is to protect employees from unnecessary stress and negative experiences that drain mental health and increase the risk of mental harm.

Three examples of KPBs relevant to the employee experience come from Dr. Bill Howatt's recent contracted applied corporate research project on KPBs [113]. KPBs can be audited and are important indicators of employee engagement and lost time (i.e., sick time, STD, LTD). This project indicated that groups who measured

KPBs year-after-year also scored higher in employee engagement compared to those who did not. This finding is aligned with those from the American Institute of Stress [114], which reported that engagement levels and overall mental health are directly impacted in the approximately 83% of employees who experience stress. The employee experience matters and helps organizations understand the benefits of focusing on mental health support and behaviours that prevent mental harm and promote mental health. The KPBs include:

- i. **Leadership KPB:** Leaders follow up and make their one-on-one employee meetings a priority. The goal is to learn what the employee is doing, how they are doing, and what can be done to help them complete their work.
- ii. **Employee KPB:** Employees are encouraged to schedule 30 minutes a week to meet in person or virtually with a workplace friend to share their successes, challenges, and goals. Leaders are encouraged to support their direct reports to find a workplace friend and ensure that every worker has at least one psychologically safe pillar.
- iii. **Senior Leadership KPB:** Senior leadership takes accountability to support the employee experience using weekly pulse check data. These data provide confidential feedback on what is charging and draining employees' batteries. The chargers and drains are identified in a listening tour with the employees. This exercise challenges leadership to evaluate and create conversations and actions that reduce mental drains and increase mental chargers (i.e., reduce psychosocial stressors, implement protective factors, or make decisions that empower employees).

Various KPBs can be used as indicators to promote workers' mental health and to protect them from psychological harm. The selected KPBs should be evaluated for any risk of harm, similar to how OHS may use safety tool talks as a lead indicator to lower the incidence of lagged indicators like near misses.

6.5.2 The Importance of Fostering Inclusivity

Many workplace diversity initiatives focus on narrow definitions such as gender and ethnic/racial diversity. However, visible and invisible diversity includes sexual orientation and neurodiversity. An inclusive approach to

supporting diversity considers both visible and hidden forms of diversity and ensures that employees feel welcomed and valued as they are. This outcome can be accomplished one interaction at a time by building authentic connections and fostering environments where employees can show up as their authentic, diverse selves.

DEI initiatives should not be limited to adding visibly diverse employees to the workplace, but rather about integrating diversity. When integration is not achieved, diversity, inclusion, and equity initiatives can inadvertently create feelings of shame and guilt for some in most groups, which does not contribute to an inclusive workplace. Inclusion interventions should lead to greater inclusivity for all groups, not decrease for some groups and increase for others. We were unable to identify a well-validated measure of inclusivity suitable for this study. As such, we developed a brief inclusion rating scale to examine this question (see Appendix A) and to encourage employers to consider integrating psychological safety and DEI when designing workplace mental health strategies, programs, and policies. Notably, our measure of inclusivity included ratings of feeling welcomed, belonging, respected, and valued. Simply tolerating aspects of diversity is insufficient; celebrating diversity is necessary. The lack of well-validated measures of inclusivity in the workplace through a psychological safety lens may limit progress in this area until further research and reporting efforts are developed.

6.5.3 The Importance of Continuous Improvement and PDCA

CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2022) highlights the importance of continual improvement. A PDCA approach is critical to support ongoing and positive workplace mental health [7]. The employer report noted significant gaps in adopting and practicing a PDCA approach [1]. From the employee perspective, this report also found the importance of the "C" (checking) and the "A" (acting or adjusting). The "checking" requires engagement with employees to ensure that their feedback and experiences are considered. Since we did not identify well-validated measures of inclusion in the workplace, the assessment of inclusion alongside PHS is challenging. We recommend that employers consider inclusivity when

measuring psychosocial hazards and program impact. For instance, an employer may consider whether the impact of a program was equally beneficial for everyone, or if some populations were less likely to participate or benefit. Based on the findings in this report, we recommend that employers evaluate all workplace mental health initiatives to promote PHS through an intersectional lens and move toward removing implicit bias to facilitate equity.

6.6 Limitations and Future Directions

The most significant limitation of this research is that the groups evaluated throughout the two phases of this study are not directly comparable. Specifically, the survey respondents in Phase II of this study were not the employees of the employers from Phase I of this study. Additionally, the two groups completed their respective surveys at a different time during the pandemic. The employer survey collected responses between April and September 2021, whereas the employee survey collected responses between June and November 2022. These two periods of data collection differed in many ways, including the public health recommendations at the time of data collection. PPE, lockdowns, and access to vaccines were key issues during the employer survey, whereas vaccine mandates and return-to-office policies were top of mind during the employee survey. All comparisons made between the survey results must be interpreted given these differences. Despite these limitations, the two reports provide meaningful insights into the importance of employee engagement and the areas where employees and employers may be misaligned. Due to the limited sample size, this study's results cannot be generalized to recommendations for all PHS initiatives implemented by Canadian employers. However, these findings provide employers with suggestions for engaging their employees and the degree to which employers can control psychosocial risk factors and protect and promote workers' mental health. By measuring the strengths of mental health initiatives there is an opportunity to leverage the benefits of a PDCA approach and apply a similar method to promote workplace mental health. Furthermore, employers can protect workers from ineffective leadership and enrich their experiences by defining and promoting KPBs.

Key future directions that emerged from this study include emphasizing the impact of inclusivity on the employee experience and outcomes relevant to workplaces (e.g., disability claims). As this was not the core purpose of the present study, inclusion scores for each group identified in our intersectionality analysis were not included in this report. However, future research should examine inclusion scores based on a similar intersectionality analysis with a larger sample of participants. Understanding inclusivity through an intersectionality lens provides a more comprehensive understanding of diversity and the opportunity to enhance inclusion for both visible and invisible forms of diversity. Given the importance of data collection and evaluation to achieve continuous improvement, workplaces need access to more effective assessment tools to reliably measure key challenges in the workplace.

6.7 Conclusion

Every employee's experience is unique, and employers' actions significantly contribute to fostering a welcoming, safe, and inclusive environment. This study provided an opportunity to explore the psychosocial factors of most concern to employees and programs employers can initiate to support employees during and after the pandemic. Phase I and II of this study allowed us to compare across employer and employee perceptions. Although there were no substantial differences between the top psychosocial factors of concern between respondent groups or what programs protected employees and were perceived as helpful, both studies indicated that employers should not make assumptions about employee needs. Instead, employers should measure the psychosocial risk factors and hazards that directly impact their workplaces so that they can plan accordingly.

The literature review and survey results in this study build upon the findings in Phase I. They help clarify the actions that employers can take to protect employees, positively influence the employee experience, mitigate mental harm, and promote mental health. These findings are helpful for decision-makers tasked with workplace mental health to explore programs that can have an impact. The importance and impact of psychological safety and mental health in the workplace will continue to increase. Employers and employees both play a critical role in ensuring workplaces are safe and inclusive so that organizations and employees can thrive.

References

- [1] D. Lee-Baggley and B. Howatt, "Psychological health and safety in the workplace: Employer practices in response to COVID-19," *CSA Group*, 2022. <https://www.csagroup.org/article/research/psychological-health-and-safety-in-the-workplace-employer-practices-in-response-to-covid-19/> (accessed Jan. 19, 2023).
- [2] *Psychological Health and Safety in the Workplace - Prevention, Promotion, and Guidance to Staged Implementation*, CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2022), Canadian Standards Association, Toronto, ON, 2013.
- [3] *Management of Impairment in the Workplace*, CSA Z1008:21, Canadian Standards Association, Toronto, ON, 2021.
- [4] *Workplace Disability Management System*, CSA Z1011:20, Canadian Standards Association, Toronto, ON, 2020.
- [5] APA, "Workers appreciate and seek mental health support in the workplace," 2022. Accessed: Jan. 19, 2023. [Online]. Available: <https://www.apa.org/pubs/reports/work-well-being/2022-mental-health-support>
- [6] MHCC, "Psychological health & safety an action guide for employers," 2012. [Online]. Available: https://www.mentalhealthcommission.ca/wp-content/uploads/drupal/Workforce_Employers_Guide_ENG_1.pdf
- [7] CSA, "Psychological health and safety in the workplace," 2013. <https://www.csagroup.org/article/cancca-z1003-13-bnq-9700-803-2013-r2018/> (accessed Dec. 07, 2021).
- [8] Telus Health, "Four ways to prepare for the disability deluge.," *Health Benefits Hub*, May 07, 2021. <https://plus.telushealth.co/blogs/health-benefits/en/four-ways-to-prepare-for-the-disability-deluge/> (accessed Jan. 23, 2022).
- [9] Deloitte, "The ROI in workplace mental health programs: Good for people, good for business," *Deloitte Insights*, 2019. <https://www2.deloitte.com/us/en/insights/topics/talent/workplace-mental-health-programs-worker-productivity.html> (accessed Jan. 24, 2022).
- [10] K. Rolfe, "'A pandemic after the pandemic': Insurers brace for disability claims 'deluge' from mental, physical strain of crisis," *Financial Post*, 2021. [Online]. Available: <https://financialpost.com/fp-work/a-pandemic-after-the-pandemic-insurers-brace-for-disability-claims-deluge-from-mental-physical-strain-of-crisis>
- [11] Canadian Human Rights Commission, "COVID-19 and mental health in the workplace," 2020. [Online]. Available: https://www.chrc-ccdp.gc.ca/sites/default/files/publication-pdfs/2834735_-_mental_health_covid_guide_-_en_-_final.pdf
- [12] Canadian Centre for Occupational Health and Safety, "CCOHS: COVID-19 health and safety resources," Canadian Centre for Occupational Health and Safety. <https://www.ccohs.ca/products/publications/covid19-tool-kit/> (accessed Mar. 9, 2023).
- [13] US Surgeon General, "Workplace mental health & well-being," 2022. [Online]. Available: <https://www.hhs.gov/sites/default/files/workplace-mental-health-well-being.pdf>

- [14] Office of the Assistant Secretary for Health, "U.S. surgeon general releases new framework for mental health & well-being in the workplace," *HHS.gov*, Oct. 20, 2022. <https://www.hhs.gov/about/news/2022/10/20/us-surgeon-general-releases-new-framework-mental-health-well-being-workplace.html> (accessed Jan. 28, 2023).
- [15] D. Lee-Baggley and B. Howatt, "Extended mental health benefits in Canadian Workplaces: Employee and employer perspectives," *Mental Health Commission of Canada*, 2022. <https://mentalhealthcommission.ca/resource/extended-mental-health-benefits-in-canadian-workplaces-employee-and-employer-perspectives/> (accessed Jan. 19, 2023).
- [16] Conference Board of Canada, "How has COVID-19 impacted Canadians mental health?" *The Conference Board of Canada*, 2020. <https://www.conferenceboard.ca/in-fact/how-has-covid-19-impacted-canadians-mental-health/> (accessed Jan. 19, 2023).
- [17] R. M. da Silva Neto, C. J. R. Benjamim, P. M. de Medeiros Carvalho, and M. L. R. Neto, "Psychological effects caused by the COVID-19 pandemic in health professionals: A systematic review with meta-analysis," *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, vol. 104, p. 110062, Jan. 2021, doi: 10.1016/j.pnpbp.2020.110062.
- [18] T. Wu *et al.*, "Prevalence of mental health problems during the COVID-19 pandemic: A systematic review and meta-analysis," *Journal of Affective Disorders*, vol. 281, pp. 91–98, Feb. 2021, doi: 10.1016/j.jad.2020.11.117.
- [19] D. J. A. Dozois, "Anxiety and depression in Canada during the COVID-19 pandemic: A national survey," *Canadian Psychology / Psychologie canadienne*, vol. 62, pp. 136–142, 2021, doi: 10.1037/cap0000251.
- [20] A. Blasco-Belled, C. Tejada-Gallardo, M. Fatsini-Prats, and C. Alsinet, "Mental health among the general population and healthcare workers during the COVID-19 pandemic: A meta-analysis of well-being and psychological distress prevalence," *Curr Psychol*, Mar. 2022, doi: 10.1007/s12144-022-02913-6.
- [21] J. M. Cénat *et al.*, "The global evolution of mental health problems during the COVID-19 pandemic: A systematic review and meta-analysis of longitudinal studies," *Journal of Affective Disorders*, vol. 315, pp. 70–95, Oct. 2022, doi: 10.1016/j.jad.2022.07.011.
- [22] N. Almeda, D. Díaz-Milanés, M. R. Guiterrez-Colosia, and C. R. García-Alonso, "A systematic review of the international evolution of online mental health strategies and recommendations during the COVID-19 pandemic," *BMC Psychiatry*, vol. 22, no. 1, p. 621, Sep. 2022, doi: 10.1186/s12888-022-04257-8.
- [23] D. Bufquin, J.-Y. Park, R. M. Back, J. V. de Souza Meira, and S. K. Hight, "Employee work status, mental health, substance use, and career turnover intentions: An examination of restaurant employees during COVID-19," *International Journal of Hospitality Management*, vol. 93, p. 102764, Feb. 2021, doi: 10.1016/j.ijhm.2020.102764.
- [24] E. Dragioti, D. Tsartsalis, M. Mentis, S. Mantzoukas, and M. Gouva, "Impact of the COVID-19 pandemic on the mental health of hospital staff: An umbrella review of 44 meta-analyses," *International Journal of Nursing Studies*, vol. 131, p. 104272, Jul. 2022, doi: 10.1016/j.ijnurstu.2022.104272.
- [25] S. Ghahramani, H. Kasraei, R. Hayati, R. Tabrizi, and M. A. Marzaleh, "Health care workers' mental health in the face of COVID-19: a systematic review and meta-analysis," *International Journal of Psychiatry in Clinical Practice*, pp. 1–10, Jul. 2022, doi: 10.1080/13651501.2022.2101927.

- [26] I. D. Saragih *et al.*, "Global prevalence of mental health problems among healthcare workers during the Covid-19 pandemic: A systematic review and meta-analysis," *International Journal of Nursing Studies*, vol. 121, p. 104002, Sep. 2021, doi: 10.1016/j.ijnurstu.2021.104002.
- [27] K. Pandey *et al.*, "Mental health issues during and after COVID-19 vaccine era," *Brain Research Bulletin*, vol. 176, pp. 161–173, Nov. 2021, doi: 10.1016/j.brainresbull.2021.08.012.
- [28] D. B. G. Tai, I. G. Sia, C. A. Doubeni, and M. L. Wieland, "Disproportionate impact of COVID-19 on Racial and ethnic minority groups in the United States: a 2021 Update," *J. Racial and Ethnic Health Disparities*, vol. 9, no. 6, pp. 2334–2339, Dec. 2022, doi: 10.1007/s40615-021-01170-w.
- [29] R. Chander *et al.*, "Addressing the mental health concerns of migrant workers during the COVID-19 pandemic: An experiential account," *Int J Soc Psychiatry*, vol. 67, no. 7, pp. 826–829, Nov. 2021, doi: 10.1177/0020764020937736.
- [30] R. Choudhari, "COVID 19 pandemic: Mental health challenges of internal migrant workers of India," *Asian J Psychiatry*, vol. 54, p. 102254, Dec. 2020, doi: 10.1016/j.ajp.2020.102254.
- [31] B. Gibson, J. Schneider, D. Talamonti, and M. Forshaw, "The impact of inequality on mental health outcomes during the COVID-19 pandemic: A systematic review," *Canadian Psychology / Psychologie canadienne*, vol. 62, no. 1, pp. 101–126, 2021, doi: 10.1037/cap0000272.
- [32] J. Connor *et al.*, "Health risks and outcomes that disproportionately affect women during the Covid-19 pandemic: A review," *Social Science & Medicine*, vol. 266, p. 113364, Dec. 2020, doi: 10.1016/j.socscimed.2020.113364.
- [33] A. Parandeh, S. Ashtari, F. Rahimi-Bashar, K. Gohari-Moghadam, and A. Vahedian-Azimi, "Prevalence of burnout among health care workers during coronavirus disease (COVID-19) pandemic: A systematic review and meta-analysis," *Professional Psychology: Research and Practice*, vol. 53, no. 6, pp. 564–573, Dec. 2022, doi: 10.1037/pro0000483.
- [34] CMA, "2021 CMA National Physician Health Survey," *Canadian Medical Association*, 2021. <https://www.cma.ca/news/your-input-matters-cma-launches-2021-national-physician-health-survey>, <https://www.cma.ca/news/your-input-matters-cma-launches-2021-national-physician-health-survey> (accessed Jun. 11, 2022).
- [35] L. A. Morgantini *et al.*, "Factors contributing to healthcare professional burnout during the COVID-19 pandemic: A rapid turnaround global survey," *medRxiv*, May 2020, doi: 10.1101/2020.05.17.20101915.
- [36] F. Rapisarda *et al.*, "Workplace factors, burnout signs, and clinical mental health symptoms among mental health workers in Lombardy and Quebec during the first wave of COVID-19," *IJERPH*, vol. 19, no. 7, p. 3806, Mar. 2022, doi: 10.3390/ijerph19073806.
- [37] H. Wang, Y. Jin, D. Wang, S. Zhao, X. Sang, and B. Yuan, "Job satisfaction, burnout, and turnover intention among primary care providers in rural China: Results from structural equation modeling," *BMC Fam Pract*, vol. 21, no. 1, p. 12, Dec. 2020, doi: 10.1186/s12875-020-1083-8.
- [38] M. T. Niles, F. Bertmann, E. H. Belarmino, T. Wentworth, E. Biehl, and R. Neff, "The early food insecurity impacts of COVID-19," *Nutrients*, vol. 12, no. 7, p. 2096, Jul. 2020, doi: 10.3390/nu12072096.

- [39] M. D. Smith and D. Wesselbaum, "COVID-19, food insecurity, and migration," *The Journal of Nutrition*, vol. 150, no. 11, pp. 2855–2858, Nov. 2020, doi: 10.1093/jn/nxaa270.
- [40] World Health Assembly, "Global burden of mental disorders and the need for a comprehensive, coordinated response from health and social sectors at the country level: Report by the Secretariat," World Health Organization, A65/10, 2012. Accessed: Jan. 19, 2023. [Online]. Available: <https://apps.who.int/iris/handle/10665/78898>
- [41] H.-M. Vasiliadis, A. Dezetter, E. Latimer, M. Drapeau, and A. Lesage, "Assessing the costs and benefits of insuring psychological services as part of Medicare for depression in Canada," *Psychiatr Serv*, vol. 68, no. 9, pp. 899–906, Sep. 2017, doi: 10.1176/appi.ps.201600395.
- [42] R. Laynard, D. Clark, M. Knapp, and G. Mayraz, "Cost-benefit analysis of psychological therapy," *Natl. Inst. Econ. Rev.*, vol. 202, no. 1, pp. 90–98, Oct. 2007, doi: 10.1177/0027950107086171.
- [43] K. Petrie *et al.*, "Interventions to reduce symptoms of common mental disorders and suicidal ideation in physicians: a systematic review and meta-analysis," *The Lancet Psychiatry*, vol. 6, no. 3, pp. 225–234, Mar. 2019, doi: 10.1016/S2215-0366(18)30509-1.
- [44] M. Williams, D. Rosen, and J. Kanter, *Eliminating Race-Based Mental Health Disparities: Promoting Equity and Culturally Responsive Care Across Settings*. Context Press Inc., Oakland, CA, 2019.
- [45] S. Knaak, E. Mantler, and A. Szeto, "Mental illness-related stigma in healthcare: Barriers to access and care and evidence-based solutions," *Healthc Manage Forum*, vol. 30, no. 2, pp. 111–116, Mar. 2017, doi: 10.1177/0840470416679413.
- [46] L. McFarling, M. D'Angelo, M. Drain, D. A. Gibbs, and K. L. Rae Olmsted, "Stigma as a barrier to substance abuse and mental health treatment," *Military Psychology*, vol. 23, no. 1, pp. 1–5, Jan. 2011, doi: 10.1080/08995605.2011.534397.
- [47] T. L. Bridson, K. Jenkins, K. G. Allen, and B. M. McDermott, "PPE for your mind: A peer support initiative for health care workers," *Medical Journal of Australia*, vol. 214, no. 1, p. 8, Jan. 2021, doi: 10.5694/mja2.50886.
- [48] P. Gray, S. Senabe, N. Naicker, S. Kgalamono, A. Yassi, and J. M. Spiegel, "Workplace-based organizational interventions promoting mental health and happiness among healthcare workers: A realist review," *IJERPH*, vol. 16, no. 22, p. 4396, Nov. 2019, doi: 10.3390/ijerph16224396.
- [49] S. Sockalingam, C. Clarkin, E. Serhal, C. Pereira, and A. Crawford, "Responding to health care professionals' mental health needs during COVID-19 through the rapid implementation of project ECHO," *J Contin Educ Health Prof*, vol. 40, no. 3, pp. 211–214, 2020, doi: 10.1097/CEH.0000000000000311.
- [50] M. J. Serrano-Ripoll *et al.*, "Effect of a mobile-based intervention on mental health in frontline healthcare workers against COVID-19: Protocol for a randomized controlled trial," *J Adv Nurs*, vol. 77, no. 6, pp. 2898–2907, Jun. 2021, doi: 10.1111/jan.14813.
- [51] F. Pallavicini *et al.*, "A virtual reality home-based training for the management of stress and anxiety among healthcare workers during the COVID-19 pandemic: Study protocol for a randomized controlled trial," *Trials*, vol. 23, no. 1, p. 451, Dec. 2022, doi: 10.1186/s13063-022-06337-2.

- [52] H. Blake, F. Bermingham, G. Johnson, and A. Tabner, "Mitigating the psychological impact of COVID-19 on Healthcare Workers: A digital learning package," *IJERPH*, vol. 17, no. 9, p. 2997, Apr. 2020, doi: 10.3390/ijerph17092997.
- [53] K. Trottier, C. M. Monson, D. Kaysen, A. C. Wagner, R. E. Liebman, and S. E. Abbey, "Initial findings on RESTORE for healthcare workers: An internet-delivered intervention for COVID-19-related mental health symptoms," *Transl Psychiatry*, vol. 12, no. 1, p. 222, Jun. 2022, doi: 10.1038/s41398-022-01965-3.
- [54] B. Rosen *et al.*, "Resilience coaching for healthcare workers: Experiences of receiving collegial support during the COVID-19 pandemic," *General Hospital Psychiatry*, vol. 75, pp. 83–87, Mar. 2022, doi: 10.1016/j.genhosppsych.2022.02.003.
- [55] Y. Zhou *et al.*, "Tackling the mental health burden of frontline healthcare staff in the COVID-19 pandemic: China's experiences," *Psychol Med*, vol. 51, no. 11, pp. 1955–1956, Aug. 2021, doi: 10.1017/S0033291720001622.
- [56] X. Hong *et al.*, "Stress and psychological impact of the COVID-19 outbreak on the healthcare staff at the fever clinic of a tertiary general hospital in Beijing: A cross-sectional study," *BJPsych Open*, vol. 7, no. 3, p. e76, Apr. 2021, doi: 10.1192/bjo.2021.32.
- [57] Q. Chen *et al.*, "Mental health care for medical staff in China during the COVID-19 outbreak," *The Lancet Psychiatry*, vol. 7, no. 4, pp. e15–e16, Apr. 2020, doi: 10.1016/S2215-0366(20)30078-X.
- [58] J. M. P. Wilbiks, L. A. Best, M. A. Law, and S. P. Roach, "Evaluating the mental health and well-being of Canadian healthcare workers during the COVID-19 outbreak," *Healthc Manage Forum*, vol. 34, no. 4, pp. 205–210, Jul. 2021, doi: 10.1177/08404704211021109.
- [59] N. Sugaya, T. Yamamoto, N. Suzuki, and C. Uchiumi, "Social isolation and its psychosocial factors in mild lockdown for the COVID-19 pandemic: A cross-sectional survey of the Japanese population," *BMJ Open*, vol. 11, no. 7, p. e048380, Jul. 2021, doi: 10.1136/bmjopen-2020-048380.
- [60] M. Panagioti *et al.*, "Controlled interventions to reduce burnout in physicians: A systematic review and meta-analysis," *JAMA Intern Med*, vol. 177, no. 2, p. 195, Feb. 2017, doi: 10.1001/jamainternmed.2016.7674.
- [61] C. P. West, L. N. Dyrbye, P. J. Erwin, and T. D. Shanafelt, "Interventions to prevent and reduce physician burnout: A systematic review and meta-analysis," *The Lancet*, vol. 388, no. 10057, pp. 2272–2281, Nov. 2016, doi: 10.1016/S0140-6736(16)31279-X.
- [62] C. P. West, L. N. Dyrbye, and T. D. Shanafelt, "Physician burnout: Contributors, consequences and solutions," *J Intern Med*, vol. 283, no. 6, pp. 516–529, Jun. 2018, doi: 10.1111/joim.12752.
- [63] J. H. Ruotsalainen, J. H. Verbeek, A. Mariné, and C. Serra, "Preventing occupational stress in healthcare workers," in *Cochrane Database of Systematic Reviews*, The Cochrane Collaboration, Ed. Chichester, UK: John Wiley & Sons, Ltd, 2014, p. CD002892.pub4. doi: 10.1002/14651858.CD002892.pub4.
- [64] L. E. Søvold *et al.*, "Prioritizing the mental health and well-being of healthcare workers: An urgent global public health priority," *Front. Public Health*, vol. 9, p. 679397, May 2021, doi: 10.3389/fpubh.2021.679397.
- [65] M. Walton, E. Murray, and M. D. Christian, "Mental health care for medical staff and affiliated healthcare workers during the COVID-19 pandemic," *European Heart Journal: Acute Cardiovascular Care*, vol. 9, no. 3, pp. 241–247, Apr. 2020, doi: 10.1177/2048872620922795.

- [66] J. M. Geerts *et al.*, "Guidance for health care leaders during the recovery stage of the COVID-19 pandemic: A consensus statement," *JAMA Netw Open*, vol. 4, no. 7, p. e2120295, Jul. 2021, doi: 10.1001/jamanetworkopen.2021.20295.
- [67] D. Czepiel *et al.*, "The association between exposure to COVID-19 and mental health outcomes among healthcare workers," *Front. Public Health*, vol. 10, p. 896843, Jun. 2022, doi: 10.3389/fpubh.2022.896843.
- [68] M. C. T. Dimitriu *et al.*, "Burnout syndrome in Romanian medical residents in time of the COVID-19 pandemic," *Med Hypotheses*, vol. 144, p. 109972, Nov. 2020, doi: 10.1016/j.mehy.2020.109972.
- [69] A. Khajuria *et al.*, "Workplace factors associated with mental health of healthcare workers during the COVID-19 pandemic: An international cross-sectional study," *BMC Health Serv Res*, vol. 21, no. 1, p. 262, Dec. 2021, doi: 10.1186/s12913-021-06279-6.
- [70] R. M. Rodriguez *et al.*, "Academic Emergency medicine physicians' anxiety levels, stressors, and potential stress mitigation measures during the acceleration phase of the COVID-19 pandemic," *Academic Emergency Medicine*, vol. 27, no. 8, pp. 700–707, 2020, doi: 10.1111/acem.14065.
- [71] A. Simms, N. T. Fear, and N. Greenberg, "The impact of having inadequate safety equipment on mental health," *Occupational Medicine*, vol. 70, no. 4, pp. 278–281, Jun. 2020, doi: 10.1093/occmed/kqaa101.
- [72] J. L. Guttormson, K. Calkins, N. McAndrew, J. Fitzgerald, H. Losurdo, and D. Loonsfoot, "Critical care nurse burnout, moral distress, and mental health during the COVID-19 pandemic: A United States survey," *Heart & Lung*, vol. 55, pp. 127–133, Sep. 2022, doi: 10.1016/j.hrtlng.2022.04.015.
- [73] P. M. Smith, J. Oudyk, G. Potter, and C. Mustard, "The Association between the Perceived adequacy of workplace infection control procedures and personal protective equipment with mental health symptoms: A cross-sectional survey of Canadian Health-care workers during the COVID-19 pandemic: L'association entre le caractère adéquat perçu des procédures de contrôle des infections au travail et de l'équipement de protection personnel pour les symptômes de santé mentale. Un sondage transversal des travailleurs de la santé canadiens durant la pandémie COVID-19," *Can J Psychiatry*, vol. 66, no. 1, pp. 17–24, Jan. 2021, doi: 10.1177/0706743720961729.
- [74] R. Styra *et al.*, "Support for health care workers and psychological distress: Thinking about now and beyond the COVID-19 pandemic," *Health Promot Chronic Dis Prev Can*, vol. 42, no. 10, pp. 421–430, Oct. 2022, doi: 10.24095/hpcdp.42.10.01.
- [75] W. Tan *et al.*, "Is returning to work during the COVID-19 pandemic stressful? A study on immediate mental health status and psychoneuroimmunity prevention measures of Chinese workforce," *Brain, Behavior, and Immunity*, vol. 87, pp. 84–92, Jul. 2020, doi: 10.1016/j.bbi.2020.04.055.
- [76] N. Sasaki, R. Kuroda, K. Tsuno, and N. Kawakami, "Workplace responses to COVID-19 associated with mental health and work performance of employees in Japan," *Jrnl of Occup Health*, vol. 62, no. 1, Jan. 2020, doi: 10.1002/1348-9585.12134.
- [77] G. Giorgi *et al.*, "COVID-19-related mental health effects in the workplace: A narrative review," *IJERPH*, vol. 17, no. 21, p. 7857, Oct. 2020, doi: 10.3390/ijerph17217857.

- [78] M. Miglioretti, A. Gragnano, S. Margheritti, and E. Picco, "Not all telework is valuable," *Revista de Psicología del Trabajo y de las Organizaciones*, vol. 37, no. 1, pp. 11–19, Mar. 2021, doi: 10.5093/jwop2021a6.
- [79] B. Aczel, M. Kovacs, T. van der Lippe, and B. Szaszi, "Researchers working from home: Benefits and challenges," *PLoS ONE*, vol. 16, no. 3, p. e0249127, Mar. 2021, doi: 10.1371/journal.pone.0249127.
- [80] G. Kaufman and H. Taniguchi, "Working from home and changes in work characteristics during COVID-19," *Socius*, vol. 7, p. 237802312110527, Jan. 2021, doi: 10.1177/23780231211052784.
- [81] P. Karácsony, "Impact of teleworking on job satisfaction among Slovakian employees in the era of COVID-19," *Problems and Perspectives in Management*, vol. 19, no. 3, pp. 1–9, Jul. 2021, doi: 10.21511/ppm.19(3).2021.01.
- [82] D. Miron, M. A. Petcu, M. I. David-Sobolevski, and R. C. Cojocariu, "A multidimensional approach of the relationship between teleworking and employees well-being - Romania during the pandemic generated by the Sars-Cov-2 Virus," *Amfiteatru Economic*, pp. 586–600, 2021.
- [83] M. Juchnowicz and H. Kinowska, "Employee well-being and digital work during the COVID-19 pandemic," *Information*, vol. 12, no. 8, p. 293, Jul. 2021, doi: 10.3390/info12080293.
- [84] J. Rymaniak, K. Lis, V. Davidavičienė, M. Pérez-Pérez, and Á. Martínez-Sánchez, "From stationary to remote: Employee risks at pandemic migration of workplaces," *Sustainability*, vol. 13, no. 13, p. 7180, Jun. 2021, doi: 10.3390/su13137180.
- [85] J. Sandoval-Reyes, S. Idrovo-Carlier, and E. J. Duque-Oliva, "Remote work, work stress, and work-life during pandemic times: A Latin America situation," *IJERPH*, vol. 18, no. 13, p. 7069, Jul. 2021, doi: 10.3390/ijerph18137069.
- [86] S. Elbaz, J. B. Richards, and Y. Provost Savard, "Teleworking and work-life balance during the COVID-19 pandemic: A scoping review," *Canadian Psychology / Psychologie canadienne*, May 2022, doi: 10.1037/cap0000330.
- [87] T. D. Allen, K. Merlo, R. C. Lawrence, J. Slutsky, and C. E. Gray, "Boundary management and work-nonwork balance while working from home," *Applied Psychology*, vol. 70, no. 1, pp. 60–84, Jan. 2021, doi: 10.1111/apps.12300.
- [88] L. Bergefurt, M. Weijs-Perrée, R. Appel-Meulenbroek, and T. Arentze, "The physical office workplace as a resource for mental health – A systematic scoping review," *Building and Environment*, vol. 207, p. 108505, Jan. 2022, doi: 10.1016/j.buildenv.2021.108505.
- [89] A. K. Roy *et al.*, "A preliminary examination of key strategies, challenges, and benefits of remote learning expressed by parents during the COVID-19 pandemic," *School Psychology*, vol. 37, no. 2, pp. 147–159, Mar. 2022, doi: 10.1037/spq0000465.
- [90] K. Platts, J. Breckon, and E. Marshall, "Enforced home-working under lockdown and its impact on employee wellbeing: A cross-sectional study," *BMC Public Health*, vol. 22, no. 1, p. 199, Dec. 2022, doi: 10.1186/s12889-022-12630-1.
- [91] P. Rodríguez-Modroño and P. López-Igual, "Job quality and work-life balance of teleworkers," *IJERPH*, vol. 18, no. 6, p. 3239, Mar. 2021, doi: 10.3390/ijerph18063239.

- [92] S. K. Brooks *et al.*, "The psychological impact of quarantine and how to reduce it: Rapid review of the evidence," *The Lancet*, vol. 395, no. 10227, pp. 912–920, Mar. 2020, doi: 10.1016/S0140-6736(20)30460-8.
- [93] H. Bulińska-Stangrecka and A. Bagieńska, "The role of employee relations in shaping job satisfaction as an element promoting positive mental health at work in the era of COVID-19," *IJERPH*, vol. 18, no. 4, p. 1903, Feb. 2021, doi: 10.3390/ijerph18041903.
- [94] C. M. Van Der Feltz-Cornelis, D. Varley, V. L. Allgar, and E. de Beurs, "Workplace stress, presenteeism, absenteeism, and resilience amongst university staff and students in the COVID-19 lockdown," *Front. Psychiatry*, vol. 11, p. 588803, Nov. 2020, doi: 10.3389/fpsyt.2020.588803.
- [95] N. O'Brien, K. Flott, O. Bray, A. Shaw, and M. Durkin, "Implementation of initiatives designed to improve healthcare worker health and wellbeing during the COVID-19 pandemic: Comparative case studies from 13 healthcare provider organisations globally," *Global Health*, vol. 18, no. 1, p. 24, Dec. 2022, doi: 10.1186/s12992-022-00818-4.
- [96] J. E. Slaughter, A. S. Gabriel, M. L. Ganster, H. Vaziri, and R. L. MacGowan, "Getting worse or getting better? Understanding the antecedents and consequences of emotion profile transitions during COVID-19-induced organizational crisis," *Journal of Applied Psychology*, vol. 106, no. 8, pp. 1118–1136, Aug. 2021, doi: 10.1037/apl0000947.
- [97] P. M. Crittenden, S. J. Spieker, and A. Landini, "Caring for healthcare providers in COVID-19," *American Journal of Orthopsychiatry*, vol. 91, no. 2, pp. 149–161, 2021, doi: 10.1037/ort0000533.
- [98] A. E. Muller *et al.*, "The mental health impact of the covid-19 pandemic on healthcare workers, and interventions to help them: A rapid systematic review," *Psychiatry Research*, vol. 293, p. 113441, Nov. 2020, doi: 10.1016/j.psychres.2020.113441.
- [99] D. C. Thomas, "Cultural Diversity and work group effectiveness: An experimental study," *Journal of Cross-Cultural Psychology*, vol. 30, no. 2, pp. 242–263, Mar. 1999, doi: 10.1177/0022022199030002006.
- [100] T. H. Cox and S. Blake, "Managing cultural diversity: Implications for organizational competitiveness," *AMP*, vol. 5, no. 3, pp. 45–56, Mar. 1991, doi: 10.5465/ame.1991.4274465.
- [101] P. F. McKAY, D. R. Avery, and M. A. Morris, "A tale of two climates: Diversity Climate from subordinates' and managers' perspectives and their role in store unit sales performance," *Personnel Psychology*, vol. 62, no. 4, pp. 767–791, 2009, doi: 10.1111/j.1744-6570.2009.01157.x.
- [102] McKinsey & Company, "Diversity wins: How inclusion matters," 2020. [Online]. Available: <https://www.mckinsey.com/~media/mckinsey/featured%20insights/diversity%20and%20inclusion/diversity%20wins%20how%20inclusion%20matters/diversity-wins-how-inclusion-matters-vf.pdf>
- [103] Statistics Canada, "Census Counts," 2022. https://www150.statcan.gc.ca/n1/en/subjects/population_and_demography/census_counts (accessed Jan. 20, 2023).
- [104] Treasury Board of Canada, "Diversity and inclusion statistics," Sep. 14, 2020. <https://www.canada.ca/en/treasury-board-secretariat/services/innovation/human-resources-statistics/diversity-inclusion-statistics.html> (accessed Jan. 19, 2023).

- [105] B. M. Ferdman, "Paradoxes of inclusion: Understanding and Managing the Tensions of Diversity and multiculturalism," *The Journal of Applied Behavioral Science*, vol. 53, no. 2, pp. 235–263, Jun. 2017, doi: 10.1177/0021886317702608.
- [106] M. T. Majeed and R. Liaqat, "Health outcomes of social inclusion: Empirical evidence," *Pakistan Journal of Applied Economics*, vol. 29, no. 2, pp. 201–242, 2019.
- [107] M. K. Jones, P. L. Latreille, and P. J. Sloane, "Job anxiety, work-related psychological illness and workplace performance," *British Journal of Industrial Relations*, vol. 54, no. 4, pp. 742–767, 2016, doi: 10.1111/bjir.12159.
- [108] M. Rezai, K. Kolne, S. Bui, and S. Lindsay, "Measures of workplace inclusion: A systematic review using the COSMIN methodology," *J Occup Rehabil*, vol. 30, no. 3, pp. 420–454, Sep. 2020, doi: 10.1007/s10926-020-09872-4.
- [109] A. Panicker, R. Agrawal, and Dr. U. Khandelwal, "Inclusive workplace and organizational citizenship behavior: Study of a higher education institution, India," *Equality, Diversity and Inclusion: An International Journal*, vol. 37, pp. 530–550, Jun. 2018, doi: 10.1108/EDI-03-2017-0054.
- [110] V. Sveinsdottir *et al.*, "Development of the workplace inclusion questionnaire (WIQ)," *Scand J Public Health*, vol. 50, no. 3, pp. 371–380, May 2022, doi: 10.1177/1403494821990241.
- [111] K. Crenshaw, "On intersectionality: Essential writings," *Faculty Books*, Mar. 2017, [Online]. Available: <https://scholarship.law.columbia.edu/books/255>
- [112] CSA, "ISO 45003:2021," CSA Group, 2021. https://www.csagroup.org/store/product/iso_064283/?gclid=EAlalQobChMI1bik66Pg_AIVJTizAB0nogoUEAAYAiAAEgJghvD_BwE (accessed Jan. 28, 2023).
- [113] B. Howatt, "Shortcut for creating a psychologically safe workplace: Key performance behaviours," OHS Canada, Dec. 11, 2022. <https://www.ohscanada.com/opinions/shortcut-for-creating-a-psychologically-safe-workplace-key-performance-behaviours/>
- [114] D. Boyd, "Workplace stress," The American Institute of Stress, 2022. <https://www.stress.org/workplace-stress> (accessed Jan. 28, 2023).

Appendix A – Survey Items

This appendix provides an overview of the two workshops held in May and June 2022. Each of the workshops was attended by over 35 subject matter experts from across Canada. Attendees are recognized in the acknowledgements list at the beginning of this report.

Demographics

How old were you on your last birthday?

- 18–25
- 26–30
- 31–35
- 36–40
- 41–45
- 46–50
- 51–55
- 56–60
- 61–65
- 66–70
- 71+
- Prefer not to answer

What is your marital status?

- Single, never married
- Married
- Common Law
- Widow/Widower
- Divorced/Separated
- Prefer not to answer

Do you have any care responsibilities outside of the workplace? (Check all that apply)

- Child care
- Elder care
- Disability care
- Pet care
- None of the above
- Prefer not to answer

What is the highest degree or level of schooling you have completed?

- High school graduate, diploma, or the equivalent
- Some post-secondary credit, no degree
- Trade/technical/vocational training
- Associate degree
- Bachelor's degree
- Master's degree
- Professional degree (MD, DDS, etc.)
- Doctorate degree (PhD)
- Prefer not to answer

In which province or territory do you live?

- Alberta
- British Columbia
- Manitoba
- New Brunswick
- Newfoundland and Labrador
- Northwest Territories
- Nova Scotia
- Nunavut
- Ontario
- Prince Edward Island
- Quebec
- Saskatchewan
- Yukon
- Outside of Canada
- Prefer not to answer

What best describe the community you live?

- Rural
- Urban
- Prefer not to answer

What best describes your role?

- Front line worker
- Supervisor
- Middle managers
- Senior leader
- Executive leader
- Prefer not to answer

On what basis are you employed?

- Full-time employee
- Part-time employee
- Independent contractor/consultant
- Casual
- Unemployed
- Employed - off on short-term disability
- Employed - off on long-term disability
- Prefer not to answer

How long have been employed by your current employer?

- Less than 1 year
- 1-2 years
- 3-4 years
- 5-6 years
- 7-8 years
- 9-10 years
- 11-15 years
- 16-20 years
- 21+ years
- Prefer not to answer

What is your salary range?

- \$0–\$19,999
- \$20,000–\$29,999
- \$30,000–\$39,999
- \$40,000–\$49,999
- \$50,000–\$59,999
- \$60,000–\$69,999
- \$70,000–\$79,999
- \$80,000–\$89,999
- \$90,000–\$99,999
- \$100,000–\$119,999
- \$120,000–\$149,999
- \$150,000–\$199,999
- \$200,000 and above
- Prefer not to answer

Are you a member of a union?

- Yes
- No
- Prefer not to answer

Are you a member of a CUPE local?

- Yes
- No
- Prefer not to answer

What is your organization's business sector?

- Agriculture, forestry, fishing and hunting
- Associations, Labour & Member organizations
- Construction / Trades
- Education
- Engineering / Scientific / Technical Services
- Environmental
- Finance & Insurance
- Government / Judicial / Policing

- Health Care and social assistance
- I.T., Telecommunications, Information
- Management consulting services
- Manufacturing
- Media and cultural
- Mining / Oil & Gas
- Real Estate / Property Management
- Retail Trade
- Transportation / Logistics
- Utilities, power generations and transmission
- Wholesale Trade / Reseller
- Other (please specify)

What is the type of your organization?

- Private corporation
- Public corporation
- Federal Government
- Provincial Government
- Municipality
- NGO
- Non- profit
- Prefer not to answer

What is the size of your employer's organization?

- Less than 50 employees
- 50 to 149 employees
- 150 to 249 employees
- 250 to 499 employees
- 500 to 999 employees
- 1,000 to 4,999 employees
- 5,000 to 9,999 employees
- 10,000 employees or more
- Prefer not to answer

Where did you primarily work before the pandemic?

- In the office
- From home
- Hybrid (Mix)
- Travelling (e.g., driving, airport, hotels, clients' homes)
- Other (Please specify)
- Prefer not to answer

Where did you primarily work during the pandemic?

- In the office
- From home
- Hybrid (Mix)
- Travelling (e.g., driving, airport, hotels, clients' homes)
- Other (Please specify)
- Prefer not to answer

Where did you primarily work in the last month?

- In the office
- From home
- Hybrid (Mix)
- Travelling (e.g., driving, airport, hotels, clients' homes)
- Other (Please specify)
- Prefer not to answer

Visible & Hidden Diversity

What is your gender?

- Female
- Male
- Gender Variant/Non-Conforming
- Non-Binary
- Preferred term:
- Prefer not to answer

What is your ethnicity? (check all that apply)

- Black/African American
- Chinese
- Indigenous North American (e.g., First Nations, Metis, Inuit, etc.)
- Japanese
- Korean
- Latin American
- South Asian (e.g., Indian, Sri Lankan, etc.)
- Southeast Asian (e.g., Indonesian, Filipino, Thai, etc.)
- West Asian (e.g., Iranian, Afghan, etc.)
- White/Caucasian
- Other
- Prefer not to answer

Do you consider yourself neurodivergent in any of the following ways? (check all that apply)

- I don't identify myself as neurodivergent
- ADHD
- Autistic spectrum
- Dyscalculia
- Dysgraphia
- Dyslexia
- Dyspraxia
- Hyperlexia
- OCD
- Synesthesia
- Tourette Syndrome
- Other (please specify)
- Prefer not to answer

Do you consider yourself to be:

- Heterosexual or Straight
- Gay
- Lesbian
- Bisexual
- Other (please specify)
- Prefer not to answer

Psychosocial Factors

Psychosocial factors, when not managed, can put employees' mental health at risk and negatively impact employees' mental health. (If you require a definition for each psychosocial factor [click here](#)).

What are the top two psychosocial factors your organization is concerned about during COVID-19?

First Most Important Factor:

- Civility and respect
- Clear leadership and expectations
- Engagement
- Growth and development
- Involvement and influence
- Organizational culture
- Protection of physical safety
- Psychological job demands (Psychological competencies and requirements)
- Psychological protection from violence, bullying, and harassment
- Psychological support
- Recognition and reward
- Work/life balance
- Workload management
- Cumulative exposure to critical or stressful events
- Isolation (working remotely)

To what degree do you believe your organization is taking action to mitigate or address your first most important psychosocial factor?

- Not sure
- Little to no action
- Little to no action, and they don't care about this factor
- Little to no action, but it seems they care about this factor
- They have implemented minor actions
- They fully implemented a plan that significantly addresses this factor

Second Most Important Factor:

- Civility and respect
- Clear leadership and expectations
- Engagement
- Growth and development
- Involvement and influence
- Organizational culture
- Protection of physical safety
- Psychological job demands (Psychological competencies and requirements)
- Psychological protection from violence, bullying, and harassment
- Psychological support
- Recognition and reward
- Work/life balance
- Workload management
- Cumulative exposure to critical or stressful events
- Isolation (working remotely)

To what degree do you believe your organization is taking action to mitigate or address your second most important psychosocial factor?

- Not sure
- Little to no action
- Little to no action, and they don't care about this factor
- Little to no action, but it seems they care about this factor
- They have implemented minor actions
- They fully implemented a plan that significantly addresses this factor

If there are other psychosocial factors that you are concerned about, but they were not mentioned in our listing, please specify.

Psychosocial Hazards

Psychological hazards are the negative consequence employees can experience when exposed to psychological risk factors.

What are the top two psychosocial hazards your organization is concerned about during COVID-19?

First Most Important Hazard:

- Anger
- Anxiety
- Burnout
- Cognitive errors
- Compassion fatigue
- Confusion
- Distraction
- Fatigue
- Fear of the unknown
- Incivility (i.e., rudeness)
- Irritability
- Loneliness
- Overwhelmed
- Stress (i.e., distress)
- Substance use
- Suicidal ideation

To what degree do you believe your organization is taking action to mitigate or address your first most important psychosocial hazard?

- Not sure
- Little to no action
- Little to no action, and they don't care about this factor
- Little to no action, but it seems they care about this factor
- They have implemented minor actions
- They fully implemented a plan that significantly addresses this factor

Second Most Important Hazard:

- Anger
- Anxiety
- Burnout
- Cognitive errors
- Compassion fatigue
- Confusion
- Distraction
- Fatigue
- Fear of the unknown
- Incivility (i.e., rudeness)
- Irritability
- Loneliness
- Overwhelmed
- Stress (i.e., distress)
- Substance use
- Suicidal ideation

To what degree do you believe your organization is taking action to mitigate or address your second most important psychosocial hazard?

- Not sure
- Little to no action
- Little to no action, and they don't care about this factor
- Little to no action, but it seems they care about this factor
- They have implemented minor actions
- They fully implemented a plan that significantly addresses this factor

If there are other psychosocial factors that you are concerned about, but they were not mentioned in our listing, please specify:

Organizational practices, policies, or programs

Please rate the following practices, policies or programs as to whether you are aware it exists, whether you used the program during or before the pandemic and the impact of the program. Regarding impact, please consider: **What kind of impact did participating in the following programs have on your health, life or work?"**

For each listed item: Practices, policies or programs offered during COVID 19

- Adjusted flexible worktime policy
- Adopt or adapt the CSA psychological health and safety "Standard"
- Leaders trained in how to support employee at risk for mental health concerns in workplace.
- Adjusted sick time policy
- Adjusted work-from-home policy
- Buddy system (every employee was assigned a buddy)
- Digital mental health applications APPs
- Caregiver support (CSA B701: Carer-inclusive and accommodating organizations)
- Cognitive behavioural therapy (CBT)
- Regular communications (e.g., daily organizational huddles, email, intranet)
- Educational webinars on various topics (e.g., working remotely, loneliness)
- Employee and family assistance program (EFAP)
- Facilitate social connections (e.g., employee-manager and team check ins, social activities)
- Leaders trained in how to be a psychological safe leader
- On-demand resources (e.g., Life Speak, other educational resources)
- Suicide prevention training for managers
- Paramedical psychological services
- Peer support program
- Promote local community resources (e.g., CMHA, suicide, domestic violence shelters, Wellness Together)
- Pulse checks to monitor employees' experience
- Resiliency training
- Upgraded technology: stable and secure video conference platform
- Workplace survey designed to obtain employees' perceptions and mental health benchmark (e.g., Mental Fitness Index)

Please choose how frequently you have faced the following barriers in accessing mental health and addiction support since the beginning of the pandemic?

- Affordability, including lack of employment-based benefits or inability to pay out of pocket
- Not knowing where to go for help
- Long wait times
- Shortage of accessible mental health professionals
- Difficulty navigating mental health and addiction system
- Lack of confidence in the health care system
- Culture or language barriers
- Stigma about my gender asking for help
- Racism or structural stigma
- Concerns about stigma around mental health
- Concern about colleagues or employers knowing that you are accessing mental health services
- Lack of access where I live (e.g., rural or no youth services)
- The cost of services not covered by private insurance plans
- I prefer dealing with issues on my own
- Concern about implications for licensing or professional insurance (Choose "Unsure" if it's not applicable)

Absenteeism

Have you ever been on short-term leave?

- Yes, and it was within the past 2 years (during the pandemic)
- Yes, and it was before the beginning of the pandemic.
- Yes, and it was BOTH before and during the pandemic.
- No.
- Prefer not to answer

Have you ever been on long-term leave?

- Yes, and it was within the past 2 years (during the pandemic)
- Yes, and it was before the beginning of the pandemic.
- Yes, and it was BOTH before and during the pandemic.
- No.
- Prefer not to answer

Have you ever been on WCB disability leave?

- Yes, and it was within the past 2 years (during the pandemic)
- Yes, and it was before the beginning of the pandemic.
- Yes, and it was BOTH before and during the pandemic.
- No.
- Prefer not to answer

Occupational Safety Risk

In the past 12 months, have you personally experienced and/or observed any of the following in the workplace?

Please take into consideration the current environment of your working arrangement, whether it be at home or the office.

- Misunderstandings
- Rudeness or incivility
- Moments of conflict
- Ongoing, or unresolved conflict
- Covert psychological bullying
- Overt psychological bullying
- Racism
- Discrimination
- Harassment
- Bias or Prejudice

Concerns

To what extent are you concerned about the following in your work and/or life?

- Psychological safety – concerned about being judged, bullied or harassed at work
- Mental health – challenged by mental health or mental illness
- Job security – uncertainty about having or keeping job
- Financial stability – anxious about money
- Physical health – challenged because of physical health issues (e.g., obesity)
- Food security – availability of sufficient, safe, and nutritious food
- Housing stability – affordable housing

Diversity, Equity, and Inclusion

Please rate each one of the following statements from 1 to 10:

- How would you rate your level of feeling included in this workplace?
- How would you rate your level of feeling welcomed in this workplace?
- How would you rate your level of feeling safe in this workplace?
- How would you rate your level of feeling like you belong in this workplace?
- How would you rate your level of feeling respected in this workplace?
- How would you rate your level of feeling valued in this workplace?
- How would you rate your level of feeling heard or understood in this workplace?

Qualitative Questions

It is likely that your organization has implemented new or made use of existing programs to address the potential impact of COVID-19 on your well-being. In this section, we're interested in learning more about your top choice in these areas.

- What was the most significant initiative (e.g., priorities, practices, policies, programs, innovations) provided by your organization that had the biggest impact on employee psychological health and safety during the COVID-19 pandemic?
- What would you say is the biggest gap that your employer did not address regarding employees' psychological health and safety during the COVID-19 pandemic?
- What initiatives (e.g., policies, programs, practices) from your employer regarding mental health and addiction do you think are needed to support employees' psychological health and safety?

Appendix B – Additional Tables

Table B-1: Summary of demographic characteristics of the sample: Business sector

Sector	Frequency	Percentage (%)
Health Care	231	16
Other (e.g., entertainment, show industry, food services, airplane crew)	189	13
Transportation & Logistics	171	12
Retail Trade	94	7
Manufacturing	91	6
Finance & Insurance	87	6
I.T., Telecommunications & Information	74	5
Education	67	5
Construction & Trades	60	4
Social Services	55	4
Government	54	4
Post-secondary	41	3
Engineering, Scientific & Technical Services	36	3
Wholesale Trade & Reseller	30	2
Associations, Labour & Member Organizations	23	2
Management Consulting Services	20	1
Library	17	1
Agriculture, Forestry, Fishing & Hunting	13	1
Media & Cultural	11	1
Real Estate & Property Management	9	1
Environmental	8	1
Judicial	7	0
Communications	7	0
Utilities, Power Generations & Transmission	6	0
Oil & Gas	5	0
Emergency & Security Services	3	0
Mining & Mineral Extraction	3	0
Policing	1	0
Total	1413	100

Table B-2: Summary of demographic characteristics of the sample: Business type

Business Type	Frequency	Percentage (%)
Private corporation	780	55.2
Public corporation	240	17.0
Federal Government	26	1.8
Provincial Government	161	11.4
Municipality	45	3.2
NGO	7	0.5
Non-profit	100	7.1
Prefer not to answer	54	3.8
Total	1413	100

Table B-3: Summary of demographic characteristics of the sample: Organizational size

Organizational Size	Frequency	Percentage (%)
Less than 50 employees	257	18.2
50 to 149 employees	172	12.2
150 to 249 employees	84	5.9
250 to 499 employees	100	7.1
500 to 999 employees	114	8.1
1,000 to 4,999 employees	204	14.4
5,000 to 9,999 employees	132	9.3
10,000 employees or more	281	19.9
Prefer not to answer	69	4.9
Total	1413	100

Table B-4: Summary of demographic characteristics of the sample: Union

Union	Frequency	Percentage (%)
Yes	481	34.0
No	931	65.9
Prefer not to answer	1	0.1
Total	1413	100

Table B-5: Summary of demographic characteristics of the sample: Job role

Job Role	Frequency	Percentage (%)
Front line worker	779	55.1
Supervisor	166	11.7
Middle managers	242	17.1
Senior leader	68	4.8
Executive leader	52	3.7
Prefer not to answer	106	7.5
Total	1413	100

Table B-6: Summary of demographic characteristics of the sample: Job status

Job Status	Frequency	Percentage (%)
Full-time employee	1164	82.4
Part-time employee	220	15.6
Independent contractor/consultant	11	0.8
Casual	7	0.5
Employed - off on short-term disability	3	0.2
Employed - off on long-term disability	5	0.4
Prefer not to answer	3	0.2
Total	1413	100

Table B-7: Summary of demographic characteristics of the sample: Tenure

Tenure	Frequency	Percentage (%)
Less than 1 year	148	10.5
1-2 years	176	12.5
3-4 years	186	13.2
5-6 years	174	12.3
7-8 years	144	10.2
9-10 years	100	7.1
11-15 years	198	14.0
16-20 years	132	9.3
21+ years	154	10.9
Prefer not to answer	1	0.1
Total	1413	100

Table B-8: Summary of demographic characteristics of the sample: Salary

Salary	Frequency	Percentage (%)
\$0-\$19,999	66	4.7
\$20,000-\$29,999	111	7.9
\$30,000-\$39,999	156	11.0
\$40,000-\$49,999	226	16.0
\$50,000-\$59,999	200	14.2
\$60,000-\$69,999	168	11.9
\$70,000-\$79,999	112	7.9
\$80,000-\$89,999	78	5.5
\$90,000-\$99,999	58	4.1
\$100,000-\$119,999	81	5.7
\$120,000-\$149,999	56	4.0
\$150,000-\$199,999	29	2.1
\$200,000 and above	13	0.9
Prefer not to answer	59	4.2
Total	1413	100

Table B-9: Summary of demographic characteristics of the sample: Province

Province	Frequency	Percentage (%)
Alberta	160	11.3
British Columbia	199	14.1
Manitoba	47	3.3
New Brunswick	130	9.2
Newfoundland and Labrador	18	1.3
Nova Scotia	41	2.9
Ontario	568	40.2
Prince Edward Island	27	1.9
Quebec	169	12.0
Saskatchewan	50	3.5
Yukon	2	0.1
Prefer not to answer	2	0.1
Total	1413	100

Table B-10: Summary of demographic characteristics of the sample: Community

Community	Frequency	Percentage (%)
Rural	302	21.4
Urban	1104	78.1
Prefer not to answer	7	0.5
Total	1413	100

Table B-11: Summary of demographic characteristics of the sample: Education

Education	Frequency	Percentage (%)
High school graduate, diploma or the equivalent	181	12.8
Some post-secondary credit, no degree	193	13.7
Trade/technical/vocational training	235	16.6
Associate degree	126	8.9
Bachelor's degree	449	31.8
Master's degree	155	11.0
Professional degree (MD, DDS)	18	1.3
Doctorate degree (PhD)	37	2.6
Prefer not to answer	19	1.3
Total	1413	100

Table B-12: Summary of demographic characteristics of the sample: Marital status

Marital Status	Frequency	Percentage (%)
Single, never married	417	29.5
Married	614	43.5
Common Law	239	16.9
Widow/Widower	18	1.3
Divorced/Separated	110	7.8
Prefer not to answer	15	1.1
Total	1413	100

Table B-13: Summary of demographic characteristics of the sample: Age

Age	Frequency	Percentage (%)
18-25	110	7.8
26-30	147	10.4
31-35	202	14.3
36-40	215	15.2
41-45	189	13.4
46-50	148	10.5
51-55	164	11.6
56-60	127	9.0
61-65	68	4.8
66-70	31	2.2
71+	9	0.6
Prefer not to answer	3	0.2
Total	1413	100

Table B-14: Summary of demographic characteristics of the sample: Gender

Gender	Frequency	Percentage (%)
Female	861	60.9
Male	531	37.6
Non-Binary	7	0.5
Gender Variant/Non-Conforming	5	0.4
Other	4	0.3
Prefer not to answer	5	0.4
Total	1413	100

Table B-15: Summary of demographic characteristics of the sample: Ethnicity

Ethnicity	Frequency	Percentage (%)
Caucasian	1092	77.3
Visible Minorities	321	22.7
Black/African American	34	—
Chinese	87	—
Indigenous North American	50	—
Japanese	10	—
Korean	7	—
Latin American	32	—
South Asian	42	—
Southeast Asian	46	—
West Asian	13	—
Total	1413	100

Table B-16: Summary of demographic characteristics of the sample: Neurodiversity

Neurodiversity	Frequency	Percentage (%)
Non-Neurodivergent	1067	75.5
Neurodivergent	346	24.5
ADHD	162	—
Autistic Spectrum	43	—
Dyscalculia	9	—
Dysgraphia	4	—
Dyslexia	28	—
Dyspraxia	3	—
Hyperlexia	3	—
OCD	58	—
Synesthesia	5	—
Tourette Syndrome	3	—
Other	28	—
Total	1413	100

Table B-17: Summary of demographic characteristics of the sample: Sexual orientation

Sexual Orientation	Frequency	Percentage (%)
Heterosexual	1215	86.0
Bisexual	82	5.8
Gay	52	3.7
Lesbian	14	1.0
Other	19	1.3
Prefer not to answer	31	2.2
Total	1413	100

CSA Group Research

In order to encourage the use of consensus-based standards solutions to promote safety and encourage innovation, CSA Group supports and conducts research in areas that address new or emerging industries, as well as topics and issues that impact a broad base of current and potential stakeholders. The output of our research programs will support the development of future standards solutions, provide interim guidance to industries on the development and adoption of new technologies, and help to demonstrate our on-going commitment to building a better, safer, more sustainable world.