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Journal articles marked with an asterisk indicate an IWH scientist or adjunct scientist is included in the list of authors.

***Carnide N, Sritharan J, Song C, Kooshki F, and Demers PA. Risk of opioid-related harms by occupation within a large cohort of formerly injured workers in Ontario, Canada: findings from the Occupational Disease Surveillance System. *Occupational and Environmental Medicine*. 2024; [epub ahead of print].**

<https://doi.org/10.1136/oemed-2024-109458> [open access]

Abstract: Objective Working-age individuals have been disproportionately affected by the opioid crisis, prompting interest in the potential role of occupation as a contributor. This study aimed to estimate the risk of opioid-related poisonings and mental and behavioural disorders by occupation and industry within a cohort of 1.7 million formerly injured workers. Methods Workers were identified in the Occupational Disease Surveillance System, a system linking workers' compensation data (1983-2019) to emergency department and hospitalisation records (2006-2020) in Ontario, Canada. Cox proportional hazards models were used to estimate HRs and 95% CIs for hospital encounters for opioid-related poisonings and mental and behavioural disorders by occupation and industry compared with all other workers, adjusted for age, sex and birth year. Results In total, 13 702 opioid-related poisoning (p) events (n=10 064 workers) and 19 629 opioid-related mental and behavioural (mb) disorder events (n=11 755 workers) were observed. Elevated risks were identified among workers in forestry and logging (HRp=1.45, 95% CI 1.09 to 1.94; HRmb=1.70, 95% CI 1.34 to 2.16); processing (minerals, metals, clay, chemical) (HRp=1.27, 95% CI 1.14 to 1.42; HRmb=1.26, 95% CI 1.14 to 1.39); processing (food, wood, textile) (HRp=1.12, 95% CI 1.01 to 1.24; HRmb=1.19, 95% CI 1.09 to 1.31); machining (HRp=1.13, 95% CI 1.04 to 1.21; HRmb=1.17, 95% CI 1.09 to 1.25); construction trades (HRp=1.57, 95% CI 1.48 to 1.67; HRmb=1.59, 95% CI 1.51 to 1.68); materials handling (HRp=1.32, 95% CI 1.22 to 1.43; HRmb=1.22, 95% CI 1.13 to 1.31); mining and quarrying (HRmb=1.68, 95% CI 1.34 to 2.11); and transport equipment operating occupations (HRp=1.18, 95% CI

1.09 to 1.27). Elevated risks were observed among select workers in service, sales, clerical and health. Findings by industry were similar. Conclusions Results provide additional evidence that opioid-related harms cluster among certain occupational groups. Findings can be used to strategically target prevention and harm reduction activities in the workplace. Data availability statement Data are available upon reasonable request. Data may be obtained from a third party and are not publicly available.

***Dharma C, Smith PM, Escobar M, Salway T, Landsman V, Klassen B, et al. Improving prevalence estimates of mental health and well-being indicators among Sexual Minority Men: a propensity weighting approach. American Journal of Epidemiology. 2024; [epub ahead of print].**

<https://doi.org/10.1093/aje/kwae107> [open access]

Abstract: The prevalence and relative disparities of mental health outcomes and well-being indicators are often inconsistent across studies of Sexual Minority Men (SMM) due to selection biases in community-based surveys (non-probability sample), as well as misclassification biases in population-based surveys where some SMM often conceal their sexual orientation identities. The current paper estimated the prevalence of mental health related outcomes (depressive symptoms, mental health service use [MHSU], anxiety) and well-being indicators (loneliness and self-rated mental health) among SMM, broken down by sexual orientation using the Adjusted Logistic Propensity score (ALP) weighting. We applied the ALP to correct for selection biases in the 2019 Sex Now data (a community-based survey of SMMs in Canada) by reweighting it to the 2015-2018 Canadian Community Health Survey (a population survey from Statistics Canada). For all SMMs, the ALP-weighted prevalence of depressive symptoms is 15.96% (95% CI: 11.36%, 23.83%), while for MHSU, it is 32.13% (95% CI: 26.09, 41.20). The ALP estimates lie in between the crude estimates from the two surveys. This method was successful in providing a more accurate estimate than relying on results from one survey alone. We recommend to the use of ALP on other minority populations under certain assumptions

Al-Qaisi SK, Abousaleh I, Banat R, Lakissian Z, Zeineddine R, Zaghal A, et al. Sitting versus standing work postures during simulated laparoscopic surgery: in terms of user preferences, comfort, performance and biomechanics. Ergonomics. 2024; 67(10):1405-1414.

<https://doi.org/10.1080/00140139.2024.2332786>

Abstract: Prolonged standing in surgery has been linked to an increased risk of musculoskeletal disorders. The aim of this study was to determine whether sitting could serve as an alternative work posture in laparoscopic procedures. Twenty medical students in their third and fourth years were recruited. Sitting and standing were compared at two task complexity levels on a laparoscopic surgery simulator. Measured variables included user posture preferences, perceived discomfort, performance and biomechanics. Electromyography data from the upper trapezius and erector spinae muscles were analysed. Results showed that posture did not affect surgical performance and erector spinae muscle activation. Sitting showed higher muscle activation at the trapezius muscles; however, perceived discomfort was unaffected. Most participants preferred sitting for the difficult task and standing for the easy task. Findings showed that sitting, with appropriate seat design considerations, could serve as an alternative or even as a preferred work posture for simulated laparoscopic procedures

Berglund E, Friberg E, Engblom M, and Svard V. Physicians' experience of and collaboration with return-to-work coordinators in healthcare: a cross-sectional study in Sweden. *Disability and Rehabilitation*. 2024; 46(18):4120-4128.

<https://doi.org/10.1080/09638288.2023.2261851>

Abstract: PURPOSE: Return-to-work coordinators (RTWCs) give people on sick leave individualized support and coordinate between different stakeholders, including physicians. The aim of this study was to explore physicians' experience of RTWCs and investigate factors that influence how much physicians collaborate with RTWCs, or refer patients to them, in primary, orthopaedic, and psychiatric care clinics. MATERIALS AND METHODS: Of the 1229 physicians responding to a questionnaire, 629 physicians who had access to a RTWC in their clinic answered to questions about collaborating with RTWCs. RESULTS: Among physicians who had access to a RTWC, 29.0% collaborated with a RTWC at least once a week. Physicians with a more favourable experience of RTWCs reported more frequent collaboration (adjusted OR 2.92, 95% CI 2.06-4.15). Physicians also collaborated more often with RTWCs if they reported to often deal with problematic sick-leave cases, patients with multiple diagnoses affecting work ability, and conflicts with patients over sickness certification. CONCLUSIONS: Physicians who had more problematic sick-leave cases to handle and a favourable experience of RTWCs, also reported collaborating more often with RTWCs. The results indicate that RTWCs' facilitation of contacts with RTW stakeholders and improvements in the sickness certification process may be of importance for physicians

Davis M, Koroloff N, Foley SM, Marrone J, and Kwan N. Vocational rehabilitation service usage and outcomes for transition-age youth with serious mental health conditions. *Journal of Vocational Rehabilitation*. 2024; 61(2):273-287.

<https://doi.org/10.3233/JVR-240037>

Gilbert-Quimet M, Sultan-Taieb H, Aube K, Matteau L, Trudel X, Brisson C, et al. Costs of presenteeism and absenteeism associated with psychological distress among male and female older workers: a cross-sectional study. *Journal of Occupational & Environmental Medicine*. 2024; 66(10):e467-e475.

<https://doi.org/10.1097/JOM.0000000000003182>

Abstract: OBJECTIVE: We estimated, for women and men: 1) the associations between psychological distress and the prevalences of presenteeism and absenteeism, 2) average hours lost annually per person and 3) costs from the employers' economic perspective. METHODS: Participants were 1292 Canadian white-collar workers. Psychological distress, presenteeism and absenteeism were assessed with validated questionnaires. The average annual hours of productivity loss and related costs were estimated using generalized linear models with a negative binomial distribution and a log link. RESULTS: High psychological distress in women and men was associated with presenteeism costs (\$6944 and \$8432) and absenteeism costs (\$2337 and \$2796 per person). The association between psychological distress and annual hours lost to presenteeism was twice stronger for men than women. CONCLUSION: Productivity losses associated with psychological distress are high in women and men older workers

Hensrud DD, Thompson W, Rieck T, West CP, Jenkins S, Ferguson J, et al. Impact of a participatory wellness continuing medical education program on physician burnout and well-being. *Journal of Occupational & Environmental Medicine*. 2024; 66(10):e487-e492.

<https://doi.org/10.1097/JOM.0000000000003190>

Abstract: OBJECTIVE: Examine the impact of a participatory wellness continuing medical education (CME) program on physician burnout, wellness, and well-being. METHODS: Physicians attending a three-day wellness CME program. Self-reported questionnaires at baseline with paired analyses at 26-week follow-up. RESULTS: Compared to baseline, at 26 weeks there were decreases in burnout ($P < .001$, ES -0.68), red meat consumption ($P = .02$, ES -0.29), and current stress levels ($P < .001$, ES -0.50). There were increases in fruit/vegetable consumption ($P < .001$, ES 0.55), energy levels at work ($P < .001$, ES 0.60) and at home ($P < .001$, ES 0.66), quality of life ($P < .001$, ES 0.53), and confidence ($P < .001$, ES 0.89) and frequency ($P = .01$, ES 0.32) of counseling patients on wellness. CONCLUSION: Attendance at this participatory wellness CME program was associated with improved physician burnout, health behaviors in diet, stress, energy, quality of life, and wellness counseling

Hudson S, Ridland L, Blackburn J, Monchuk L, and Ousey K. The comfort and functional performance of personal protective equipment for police officers: a systematic scoping review. *Ergonomics*. 2024; 67(10):1317-1337.

<https://doi.org/10.1080/00140139.2024.2302957>

Abstract: This scoping review aimed to identify and summarise evidence on the comfort and functional performance of police officer personal protective equipment (PPE). The Arksey and O'Malley (2005) five-stage framework for scoping reviews was followed. PubMed, CINAHL, Scopus, and Web of Science were searched, and 35 articles were included in the review. The findings show that increased police PPE mass increases heart rate, metabolic energy expenditure, and perceived exertion in response to exercise. Unisex armour designs cause increased discomfort for females with larger bra sizes. PPE reduces joint-specific range of motion, with the design and location impairing movement more than mass. Jumping and sprinting performance is decreased with heavy PPE but unaffected by lighter protection, while agility is compromised with most forms of protection. Future research is needed on the fit and function of PPE for specialist police units, such as mounted police, along with further investigations on how fit can affect functional performance

Keskinen K, Lumme-Sandt K, and Nikander P. Early exit decisions in Finland: investigating the limbo between unemployment and retirement. *Nordic Journal of Working Life Studies*. 2024; 14(3):3-22.

<https://doi.org/10.18291/njwls.144460> [open access]

Abstract: Despite efforts to extend careers, workers continue to withdraw from working life before reaching the old-age pension age. The complexities behind early exit decisions have been extensively studied to understand the individual factors influencing the decision-making processes. However, fewer studies have attempted to understand how underlying cultural notions of age shape these decisions. Using qualitative longitudinal interview data from Finland, this article examined how individuals in the Finnish unemployment pathway to retirement position themselves between unemployment and retirement by drawing on age-specific discourses. Findings show that early exit was framed as the least problematic career option, although colored with ambiguity and anxiety. Individuals did not view themselves as retirees, and some expressed interest in continuing work. Nevertheless, age norms together with experienced, internalized, and expected ageism pushed

individuals toward exit, highlighting the need to better understand and support individuals experiencing late-life unemployment.

Meng Q, Zhu J, Li Z, and Chong H. Clarifying unsafe behaviors of construction workers through a complex network of unsafe behavior chains. *Journal of Construction Engineering and Management*. 2024; 150(11):04024164.

<https://doi.org/10.1061/JCEMD4.COENG-14956>

Muhl A and Korunka C. You get what you expect: assessing the effect of a compressed work schedule on time pressure, fatigue, perceived productivity, and work-life balance. *European Journal of Work and Organizational Psychology*. 2024; 33(5):703-711.

<https://doi.org/10.1080/1359432X.2024.2379061> [open access]

Abstract: With a refreshed surge of interest in alternative work schedules, such as the compressed workweek, as a tool to increase employer attractiveness, the question of the effects of such work arrangements recurs. In light of inconsistent research findings, we examined the effects of the implementation of a four-day compressed workweek on time pressure, fatigue, perceived productivity, and work-life balance within a construction company. Moreover, we investigated the effect of employee expectations. Drawing on longitudinal data (N = 247) and using Latent Change Score Modelling (LCSM), we found that work-life balance increased while fatigue and time pressure decreased. Three months after implementing a compressed work schedule, perceived productivity remained stable. These effects were contingent on individuals' expectations regarding the effect of the compressed schedule. The results highlight the importance of employee expectations in shaping the outcomes of the adoption of alternative work schedules.

Rosemberg MS, Le AB, Luu M, and Nguyen T. An online training module to increase knowledge and awareness of chemical exposures and safety measures among nail salon workers. *Journal of Occupational & Environmental Medicine*. 2024; 66(9):766-771.

<https://doi.org/10.1097/JOM.0000000000003153>

Abstract: OBJECTIVE: We developed an online training module targeting nail salon workers' knowledge of chemical exposure and safety, responding directly to the workers' expressed needs in a Midwest State. METHODS: Following a needs assessment, we designed and developed the module content. Implementation and evaluation approaches were rolled out into three phases. RESULTS: Seven workers completed the English version of the module, and 24 workers completed the Vietnamese version. The average pretest scores for those who completed the English and Vietnamese versions of the training were 81.43% and 58.33%, respectively. The average posttest score was 98.57% for English and 91.67% for Vietnamese. CONCLUSION: Culturally appropriate educational resources are effective facets of enhancing nail salon workers' awareness and their occupational health subsequently

Soucek R, Voss AS, Drexler H, and Moser K. New ways of working and psychological well-being: work intensity as a target variable of job resources. *International Journal of Workplace Health Management*. 2024; 17(4):353-366.

<https://doi.org/10.1108/IJWHM-01-2024-0010> [open access]

Abstract: Purpose Digitalization and flexibility of workplaces as aspects of new ways of working are associated both positively and negatively with employees' well-being. However, the mechanisms

behind this relationship are not clear yet. We present work intensity as a link between new ways of working and psychological well-being. Furthermore, we address two job resources to alter this association: autonomy and boundary control. Design/methodology/approach Overall, 1,099 employees of a public administration organization participated in the survey and answered a web-based questionnaire. The organization was in the transition to new ways of working including the introduction of a digital filing system and remote work. Findings The results of regression analyses provided evidence that flexibility and dissolution of boundaries were positively related to work intensity, which in turn was associated with emotional exhaustion and work engagement. Thus, new ways of working were negatively associated with psychological well-being, mediated by work intensity. Further analyses revealed that the job resources of autonomy and boundary control moderated the relationship between flexibility respectively dissolution of boundaries with work intensity. Thus, these job resources acted as buffering factors and mitigated the association of new ways of working with work intensity. Originality/value The results indicated that work intensity could be perceived as a conceptual bridge between new ways of working and psychological well-being providing a promising target variable for the deployment of job resources to preserve employees' well-being.

Vincent J, Harkry L, and Hamilton LG. Creating a diversity climate in the workplace: a mixed methods study into knowledge of autism and attitudes toward hiring autistic people in the United Kingdom. *Journal of Vocational Rehabilitation*. 2024; 61(2):303-314.

<https://doi.org/10.3233/JVR-240039>

de Wit M, Montanus A, Bosma A, and Juurlink T. Support needs for return to work among self-employed workers: a focus group study. *Journal of Occupational & Environmental Medicine*. 2024; 66(9):743-749.

<https://doi.org/10.1097/JOM.0000000000003148> [open access]

Abstract: OBJECTIVE: The aim of this study is to gain insight into the facilitators, barriers, and support needs of Dutch self-employed workers when returning to work (RTW) after sick leave. METHODS: Three focus groups were conducted, involving 15 Dutch self-employed workers who were on sick leave due to health problems. The transcripts were analyzed through thematic content analysis. RESULTS: Five main themes regarding barriers, facilitators, and needs of self-employed workers to RTW were identified: autonomy, social support, client management, financial security, and information on sick leave. Having autonomy was considered a facilitator for RTW. However, the participants expressed a need for more financial support, additional guidance from occupational health professionals, and tailored information regarding RTW. CONCLUSIONS: The results of this study emphasize a need for optimizing national policy and support for self-employed workers regarding sick leave and RTW

Witte I, Strandberg T, and Gustafsson J. Does gender matter in Supported Employment? A qualitative study of participants' experiences. *Journal of Vocational Rehabilitation*. 2024; 61(2):219-234.

<https://doi.org/10.3233/JVR-240030> [open access]

Abstract: BACKGROUND: In Sweden, gender differences have been found in standard vocational rehabilitation as well as in evidenced-based methods such as Supported Employment (SE). However, these quantitative findings have not been followed up by qualitative research to clarify the issue.

OBJECTIVE: To explore participants' experiences of participating in an SE intervention and the influence of gender on their experiences. **METHOD:** Semistructured interviews with 10 women and 7 men participating in SE in Sweden were conducted. Qualitative content analysis followed by a gender analysis were performed using the material. **RESULTS:** The participating men and women had different background characteristics. Overall, the participants shared the same experiences of SE. They valued a trustful relationship with the employment specialist and the diversified and individualized support from the employment specialist. Unlike the men, the women had experienced difficulties receiving SE from authorities, and when receiving SE, they expressed the value of a slow start, being challenged, and whole-life support. **CONCLUSION:** The findings might moderate the rapid job principle in SE and indicate the need to acknowledge that the path to employment might look different, depending on the participants' gendered experiences and living conditions, for SE to be more successful for both men and women.

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