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

**\*Engel L, Ewesesan R, Arowolo I, Latulipe C, Karpa J, and Khan MN. Financial capability and financial well-being challenges and vulnerabilities of adults living with acquired brain injury: a pilot survey. Archives of Rehabilitation Research and Clinical Translation. 2024; 6(1):100324.**

<https://doi.org/10.1016/j.arrct.2024.100324> [open access]

**Abstract:** Objective To describe the financial capability (FC) and financial well-being (FWB) of adults living with acquired brain injury (ABI) from a lived experience perspective. Design People living with ABI completed a 32-item and close others a 22-item anonymous survey using either online or print/mail-in options. Setting Responses were collected from adults in the province of Manitoba (Canada) during August-October 2021. Participants Respondents were adults (18+) living with ABI (n=38) or close others of ABI survivors (n=19). Adults living with ABI experienced traumatic brain injury (n=22; 58%), stroke (n=8; 21%), or other ABI mechanisms (n=8; 21%). Nineteen (50%) respondents with ABI were men, 17 (45%) were women, and 1 (2.5%) was nonbinary; 95% were more than 1-year post-ABI. Close others were spouses/partners, parents, other family, and paid caregivers. Three of the 19 close others self-reported as men and 16 as women. Interventions n/a. Main Outcome Measure(s) n/a. Results For key FC indicators, 13 (34%) people living with ABI felt their current knowledge and skills were insufficient, and 26 (70%) felt that ABI had affected their ability to make financial decisions or complete financial activities. Fourteen of the 19 close others have worried about the finance-related choices, skills, or behaviors of the person living with ABI, and 17 felt that ABI symptoms had affected the FC of the person living with ABI. For key FWB indicators, 22 (58%) adults living with ABI felt stressed or anxious about finances at least some of the time. Seventeen (45%) of the adults living with ABI reported having trouble making ends meet at least some of the time. Conclusions Respondents reported FC limitations and FWB challenges for people living with ABI,

which can be indicative of financial vulnerabilities and unmet needs. Future research should explore optimal ways to address these financial-related challenges after ABI.

**Babic A, Barcot O, Viskovic T, Saric F, Kirkovski A, Barun I, et al. Frequency of use and adequacy of Cochrane risk of bias tool 2 in non-Cochrane systematic reviews published in 2020: meta-research study. *Research Synthesis Methods*. 2024; 15(3):430-440.**

<https://doi.org/10.1002/jrsm.1695>

Abstract: Risk of bias (RoB) assessment is essential to the systematic review methodology. The new version of the Cochrane RoB tool for randomized trials (RoB 2) was published in 2019 to address limitations identified since the first version of the tool was published in 2008 and to increase the reliability of assessments. This study analyzed the frequency of usage of the RoB 2 and the adequacy of reporting the RoB 2 assessments in non-Cochrane reviews published in 2020. This meta-research study included non-Cochrane systematic reviews of interventions published in 2020. For the reviews that used the RoB 2 tool, we analyzed the reporting of the RoB 2 assessment. Among 3880 included reviews, the Cochrane RoB 1 tool was the most frequently used (N = 2228; 57.4%), followed by the Cochrane RoB 2 tool (N = 267; 6.9%). From 267 reviews that reported using the RoB 2 tool, 213 (79.8%) actually used it. In 26 (12.2%) reviews, erroneous statements were used to indicate the RoB 2 assessment. Only 20 (9.4%) reviews presented a complete RoB 2 assessment with a detailed table of answers to all signaling questions. The judgment of risk of bias by the RoB 2 tool was not justified by a comment in 158 (74.2%) reviews. Only in 33 (14.5%) of reviews the judgment in all domains was justified in the accompanying comment. In most reviews (81.7%), the RoB was inadequately assessed at the study level. In conclusion, the majority of non-Cochrane reviews published in 2020 still used the Cochrane RoB 1 tool. Many reviews used the RoB 2 tool inadequately. Further studies about the uptake and the use of the RoB 2 tool are needed.

**Badarin K, Albin M, Gunn V, Kreshpaj B, Bodin T, Matilla-Santander N, et al. Safety and health among undeclared workers: a mixed methods study investigating social partner experiences and strategies. *Safety Science*. 2024; 175:106493.**

<https://doi.org/10.1016/j.ssci.2024.106493> [open access]

Abstract: Little is known about the experiences of the social partners in helping undeclared workers resist Occupational Safety and Health (OSH) issues. This study draws upon Walter Korpi's 'power resource theory' to gain a deeper understanding of how power resources within the construction, transport, and cleaning sectors influence the ability of social partners to respond to OSH issues related to undeclared work. This mixed-method study uses survey data from employer representatives in the construction (n = 686) and transport (n = 650) sectors in Sweden in 2019 to estimate the nature and magnitude of undeclared work-related problems. To also study the view of union representatives, a duplicate survey was sent to union representatives in the transport, construction, and cleaning sectors (n = 57) in 2020, followed by 13 semi-structured interviews with Regional Safety Representatives (RSRs) in 2021–2023. Our findings show that employer representatives in construction and transport reported that the violation of OSH regulations was uncommon and remained unchanged, most union representatives said the opposite. We found a gradient of activism among the unions towards OSH issues related to undeclared work dependent on their power resources. Furthermore, structural and organizational factors limited the RSRs' ability to address undeclared work. The RSRs identified strategies to tackle OSH issues related to undeclared

work in their sectors, these included but were not limited to, dismantling the language barrier between unions and undeclared foreign-born workers, for OSH coordinators and main contractors to be held responsible for OSH violations and greater cooperation between the relevant authorities dealing with undeclared work.

**Cote D, MacEachen E, Huynh AT, Leon A, Laberge M, Meyer S, et al. Managing the unknown or the art of preventing SARS-CoV-2 infection in workplaces in a context of evolving science, precarious employment, and communication barriers. A qualitative situational analysis in Quebec and Ontario. *Frontiers in Public Health*. 2023; 11:1268996.**

<https://doi.org/10.3389/fpubh.2023.1268996> [open access]

**Abstract:** Introduction: The issue of communications in the public space, and in particular, in the workplace, became critical in the early stages of the SARS-CoV-2 pandemic and was exacerbated by the stress of the drastic transformation of the organization of work, the speed with which new information was being made available, and the constant fear of being infected or developing a more severe or even fatal form of the disease. Although effective communication is the key to fighting a pandemic, some business sectors were more vulnerable and affected than others, and the individuals in particular socio-demographic and economic categories were proportionately more affected by the number of infections and hospitalizations, and by the number of deaths. Therefore, the aim of this article is to present data related to issues faced by essential workers interacting with the public and their employers to mitigate the contagion of SARS-CoV-2 (COVID-19) at work. **Methods:** Following the constructivist paradigm, an interpretative qualitative design was used to conduct one-on-one interviews with precarious/low-wage, public-contact workers (N = 40), managers (N = 16), and key informants (N = 16) on topics related to their work environments in the context of COVID-19 prevention. **Results:** This article has highlighted some aspects of communication in the workplace essential to preventing COVID-19 outbreaks (e.g., access to information in a context of fast-changing instructions, language proficiency, transparency and confidentiality in the workplace, access to clear guidelines). The impact of poor pre-pandemic working relations on crisis management in the workplace also emerged. **Discussion:** This study reminds us of the need to develop targeted, tailored messages that, while not providing all the answers, maintain dialog and transparency in workplaces.

**Demou E, Blake C, Tan Llorin C, Salanga MG, Mateo NJ, Lewis R, et al. Group-level workplace interventions to improve mental health in low control, high-demand office-based jobs. A scoping review. *Annals of Work Exposures and Health*. 2024; 68(4):335-350.**

<https://doi.org/10.1093/annweh/wxae012> [open access]

**Abstract:** Objectives: Workplace psychosocial risk factors, including low autonomy and high demands, have negative consequences for employee mental health and wellbeing. There is a need to support employees experiencing mental health and well-being problems in these jobs. This scoping review aims to describe group-level workplace interventions and their approaches to improving the mental health and well-being of employees in office-based, low autonomy, and high demands jobs. **Methods:** Following PRISMA-ScR guidelines, a search was conducted across 4 databases (Medline, PsycINFO, CINAHL, ASSIA). We explored studies presenting group-level interventions, mode of implementation, facilitators and barriers, and intervention effectiveness. The search was restricted to include office-based, low autonomy, and high-demands jobs. Primary outcome of interest was mental health and secondary outcomes were work-related and other well-being outcomes. **Results:** Group-level

workplace interventions include an array of organizational, relational, and individual components. Almost all included a training session or workshop for intervention delivery. Several had manuals but theories of change were rare. Most workplace interventions did not use participatory approaches to involve employees in intervention development, implementation and evaluation, and challenges and facilitators were not commonly reported. Key facilitators were shorter intervention duration, flexible delivery modes, and formalized processes (e.g. manuals). A key barrier was the changeable nature of workplace environments. All studies employing behavioural interventions reported significant improvements in mental health outcomes, while no clear pattern of effectiveness was observed for other outcomes or types of interventions employed. Conclusions: Group-based interventions in low-autonomy office settings can be effective but few studies used participatory approaches or conducted process evaluations limiting our knowledge of the determinants for successful group-based workplace interventions. Involving stakeholders in intervention development, implementation, and evaluation is recommended and can be beneficial for better articulation of the acceptability and barriers and facilitators for delivery and engagement.

**Granger S and Turner N. Work injuries and mental health challenges: a meta-analysis of the bidirectional relationship. *Personnel Psychology*. 2024; [epub ahead of print].**

<https://doi.org/10.1111/peps.12649> [open access]

Abstract: The link between work injuries and mental health challenges significantly impacts individuals, organizations, and society. However, an integrated understanding of their relationship is lacking due to fragmented research across various disciplines. Drawing from uncertainty in illness theory, our comprehensive meta-analysis (147 samples,  $N = 1,457,562$ ) clarifies the bidirectional relationship between work injuries and mental health challenges. We estimate the average strength of the association, compare temporal ordering (work injuries preceding mental health challenges, and vice versa), explore underlying mechanisms, and identify potential moderating factors. Results from a random-effects model reveal a moderate association between work injuries and mental health challenges ( $k = 147$ ,  $\rho = .21$ , 95% CI = .19, .24, 95% CR = -.11, .50). Notably, the relationship is stronger when work injuries precede mental health challenges ( $k = 40$ ,  $\rho = .23$ , 95% CI = .18, .29, 95% CR = -.10, .52) compared to the reverse ( $k = 18$ ,  $\rho = .11$ , 95% CI = .03, .19, 95% CR = -.23, .42). Negative cognitions and perceived job demand underlie the bidirectional relationships between work injuries and mental health challenges. These findings highlight the interconnected nature of work injuries and mental health challenges, illustrating the need for comprehensive rehabilitation approaches that integrate physical and psychological care, and paving the way for future research and interventions.

**Hebard S, Weaver G, Hansen WB, and Ruppert S. Evaluation of a pilot program to prevent the misuse of prescribed opioids among health care workers: repeated measures survey study. *JMIR Formative Research*. 2024; 8:e53665.**

<https://doi.org/10.2196/53665> [open access]

Abstract: BACKGROUND: Overprescription of opioids has led to increased misuse of opioids, resulting in higher rates of overdose. The workplace can play a vital role in an individual's intentions to misuse prescription opioids with injured workers being prescribed opioids, at a rate 3 times the national average. For example, health care workers are at risk for injuries, opioid dispensing, and diversion. Intervening within a context that may contribute to risks for opioid misuse while targeting individual psychosocial factors may be a useful complement to interventions at policy and prescribing levels.

**OBJECTIVE:** This pilot study assessed the effects of a mobile-friendly opioid misuse intervention prototype tailored for health care workers using the preparation phase of a multiphase optimization strategy design. **METHODS:** A total of 33 health care practitioners participated in the pilot intervention, which included 10 brief web-based lessons aimed at impacting psychosocial measures that underlie opioid misuse. The lesson topics included: addiction beliefs, addiction control, Centers for Disease Control and Prevention guidelines and recommendations, beliefs about patient-provider relationships and communication, control in communicating with providers, beliefs about self-monitoring pain and side effects, control in self-monitoring pain and side effects, diversion and disposal beliefs, diversion and disposal control, and a conclusion lesson. Using a treatment-only design, pretest and posttest surveys were collected. A general linear repeated measures ANOVA was used to assess mean differences from pretest to posttest. Descriptive statistics were used to assess participant feedback about the intervention. **RESULTS:** After completing the intervention, participants showed significant mean changes with increases in knowledge of opioids (+0.459;  $P<.001$ ), less favorable attitudes toward opioids (-1.081;  $P=.001$ ), more positive beliefs about communication with providers (+0.205;  $P=.01$ ), more positive beliefs about pain management control (+0.969;  $P<.001$ ), and increased intentions to avoid opioid use (+0.212;  $P=.03$ ). Of the 33 practitioners who completed the program, most felt positive about the information presented, and almost 70% (23/33) agreed or strongly agreed that other workers in the industry should complete a program like this. **CONCLUSIONS:** While attempts to address the opioid crisis have been made through public health policies and prescribing initiatives, opioid misuse continues to rise. Certain industries place workers at greater risk for injury and opioid dispensing, making interventions that target workers in these industries of particular importance. Results from this pilot study show positive impacts on knowledge, attitudes, and beliefs about communicating with providers and pain management control, as well as intentions to avoid opioid misuse. However, the dropout rate and small sample size are severe limitations, and the results lack generalizability. Results will be used to inform program revisions and future optimization trials, with the intention of providing insight for future intervention development and evaluation of mobile-friendly eHealth interventions for employees

**Jahn A, Andersen JH, Seidler A, Christiansen DH, and Dalboge A. Hip osteoarthritis and occupational mechanical exposures: a systematic review and meta-analysis. *Scandinavian Journal of Work, Environment & Health*. 2024; 50(4):244-256.**

<https://doi.org/10.5271/sjweh.4152> [open access]

**Abstract:** **OBJECTIVES:** The aim was to conduct a systematic review and meta-analysis investigating the association between occupational mechanical exposures and hip osteoarthritis. **METHODS:** The study was registered in PROSPERO. A systematic literature search was conducted in six databases to identify relevant articles. Two authors independently excluded articles, extracted data, assessed the risk of bias of each included article, and graded the level of evidence. We conducted a meta-analysis using random-effects model and performed a sensitivity analysis stratifying articles based on the risk of bias assessment, study design, and the outcome measurement. **RESULTS:** Twenty-four articles were eligible for inclusion. The highest pooled odds ratio (OR) was found for combined mechanical exposures [OR 1.7, 95% confidence interval (CI) 1.4-2.0], non-neutral postures (OR 1.7, 95% CI 1.4-2.1), lifting/carrying loads (OR 1.6, 95% CI 1.3-1.9), and climbing stairs (OR 1.6, 95% CI 1.1-2.2). The range of pooled OR for the remaining mechanical exposures (eg, standing, walking, kneeling, squatting, and sitting) was 0.6-1.6. Grading the quality of evidence, a moderate level of evidence was

found for the combined mechanical exposures and for lifting/carrying loads. The remaining exposure categories were graded as having either low or very low levels of evidence. **CONCLUSIONS:** Considerable heterogeneity was observed across the included studies, and high-quality literature using objective exposure measurements is warranted. Despite various limitations affecting the comparability, occupational mechanical exposures seem to influence the likelihood of developing hip osteoarthritis

**Khalil H, Campbell F, Danial K, Pollock D, Munn Z, Welsh V, et al. Advancing the methodology of mapping reviews: a scoping review. *Research Synthesis Methods*. 2024; 15(3):384-397.**

<https://doi.org/10.1002/jrsm.1694>

**Abstract:** This scoping review aims to identify and systematically review published mapping reviews to assess their commonality and heterogeneity and determine whether additional efforts should be made to standardise methodology and reporting. The following databases were searched; Ovid MEDLINE, Embase, CINAHL, PsycINFO, Campbell collaboration database, Social Science Abstracts, Library and Information Science Abstracts (LISA). Following a pilot-test on a random sample of 20 citations included within title and abstracts, two team members independently completed all screening. Ten articles were piloted at full-text screening, and then each citation was reviewed independently by two team members. Discrepancies at both stages were resolved through discussion. Following a pilot-test on a random sample of five relevant full-text articles, one team member abstracted all the relevant data. Uncertainties in the data abstraction were resolved by another team member. A total of 335 articles were eligible for this scoping review and subsequently included. There was an increasing growth in the number of published mapping reviews over the years from 5 in 2010 to 73 in 2021. Moreover, there was a significant variability in reporting the included mapping reviews including their research question, priori protocol, methodology, data synthesis and reporting. This work has further highlighted the gaps in evidence synthesis methodologies. Further guidance developed by evidence synthesis organisations, such as JBI and Campbell, has the potential to clarify challenges experienced by researchers, given the magnitude of mapping reviews published every year

**Mendez-Rivero F, Matilla-Santander N, Gunn V, Wegman DH, Hernando-Rodriguez JC, Kwart S, et al. Can psychosocial risk factors mediate the association between precarious employment and mental health problems in Sweden? Results from a register-based study. *Scandinavian Journal of Work, Environment & Health*. 2024; 50(4):268-278.**

<https://doi.org/10.5271/sjweh.4151> [open access]

**Abstract:** **OBJECTIVES:** The aim of this study was to examine the mediating effect of the psychosocial work environment on the association between precarious employment (PE) and increased risk of common mental disorders (CMD), substance use disorders and suicide attempts. **METHODS:** This longitudinal register-study was based on the working population of Sweden, aged 25-60 years in 2005 (N=2 552 589). Mediation analyses based on a decomposition of counterfactual effects were used to estimate the indirect effect of psychosocial risk factors (PRF) (mediators, measured in 2005) on the association between PE (exposure, measured in 2005) and the first diagnosis of CMD, substance use disorders, and suicide attempts occurring over 2006-2017. **RESULTS:** The decomposition of effects showed that the indirect effect of the PRF is practically null for the three outcomes considered, among both sexes. PE increased the odds of being diagnosed with CMD, substance use disorders, and suicide attempts, among both men and women. After adjusting for PE, low job control increased the

odds of all three outcomes among both sexes, while high job demands decreased the odds of CMD among women. High job strain increased the odds of CMD and suicide attempts among men, while passive job increased the odds of all three outcomes among women. CONCLUSION: The results of this study did not provide evidence for the hypothesis that psychosocial risks could be the pathways linking precarious employment with workers' mental health. Future studies in different social contexts and labour markets are needed

**O'Connor FK, Meade RD, Notley SR, Ioannou LG, Flouris AD, and Kenny GP. Agreement between measured and self-reported physiological strain in males and females during simulated occupational heat stress. *American Journal of Industrial Medicine*. 2024; 67(5):466-473.**

<https://doi.org/10.1002/ajim.23580>

Abstract: Rationale: Monitoring physiological strain is recommended to safeguard workers during heat exposure, but is logistically challenging. The perceptual strain index (PeSI) is a subjective estimate thought to reflect the physiological strain index (PSI) that requires no physiological monitoring. However, sex is known to influence perceptions of heat stress, potentially limiting the utility of the PeSI. Objectives: The objective of this study was to assess whether sex modifies the relationship between PeSI and PSI. Methods: Thirty-four adults (15 females) walked on a treadmill (moderate intensity; ~200 W/m<sup>2</sup>) for 180 min or until termination (volitional fatigue, rectal temperature =39.5°C) in 16°C, 24°C, 28°C, and 32°C wet-bulb globe temperatures. Rectal temperature and heart rate were recorded to calculate PSI (0-10 scale). Rating of perceived exertion and thermal sensation were recorded to calculate PeSI (0-10 scale). Relationships between PSI and PeSI were evaluated via linear mixed models. Mean bias (95% limits of agreement [LoA]) between PSI and PeSI was assessed via Bland-Altman analysis. Mean absolute error between measures was calculated by summing absolute errors between the PeSI and the PSI and dividing by the sample size. Findings: PSI increased with PeSI ( $p < 0.01$ ) but the slope of this relation was not different between males and females ( $p = 0.83$ ). Mean bias between PSI and PeSI was small (-0.4 points), but the 95% LoA (-3.5 to 2.7 points) and mean absolute error were wide (1.3 points). Impact: Our findings indicate that sex does not appreciably impact the agreement between the PeSI and PSI during simulated occupational heat stress. The PeSI is not a suitable surrogate for the PSI in either male or female workers.

**Raei M, Shahrabaf MA, Salaree MM, Yaghoubi M, and Parandeh A. Prevalence and predictors of burnout among nurses during the COVID-19 pandemic: a survey in teaching hospitals. *Work*. 2024; 77(4):1049-1057.**

<https://doi.org/10.3233/WOR-220001>

Abstract: Background: Occupational burnout is one of the most important consequences of the coronavirus disease pandemic, associated with psychological well-being, quality of care, and intention to leave the nursing profession. This is a major health problem with serious adverse consequences not only for nurses but also for patients and healthcare systems. Objective: To assess burnout and its associated factors in nurses who worked in teaching hospitals during the COVID-19 pandemic in Iran. Methods: A cross-sectional study was conducted on nurses of two COVID-19 referral hospitals in Tehran, Iran. Data were collected using the sociodemographic form and Maslach burnout inventory-human service survey (MBI-HSS) questionnaire. Data were evaluated using SPSS software version 26. Results: A total of 264 participants, 52.7% ( $n = 139$ ) were males and the mean of them age was  $34.41 \pm 9.71$  years. Almost 50% of nurses experienced burnout, in each dimension. Emotional

exhaustion was associated significantly with job retention intention ( $P = 0.01$ ) and depersonalization was significantly associated with gender ( $P = 0.02$ ), age ( $P = 0.01$ ), educational level ( $P = 0.004$ ), work shifts ( $P = 0.006$ ), and job retention intention ( $P = 0.02$ ). In addition, personal accomplishment score was significantly associated with age ( $P = 0.002$ ), marital status ( $P = 0.03$ ), educational level ( $P = 0.03$ ), work shift ( $P = 0.04$ ) and job retention intention ( $P = 0.01$ ). Conclusion: The burnout rate in the COVID-19 era is high among nurses associated with improper care. Psychosocial support is needed to improve mental well-being among health care workers during unpredictable conditions like pandemics.

**Rosander M and Nielsen MB. Workplace bullying in a group context: are victim reports of working conditions representative for others at the workplace? *Work and Stress*. 2024; 38(2):115-134.**

<https://doi.org/10.1080/02678373.2023.2283222> [open access]

Abstract: Previous research on psychosocial working conditions as risk factors of workplace bullying builds on the underlying assumption that targets' subjective reports of their psychosocial working conditions are shared by their non-bullied colleagues. This study investigates differences in perceptions of such conditions by comparing the ratings from targets of bullying, witnesses, and non-witnesses in groups with at least one target, and groups free from bullying. We also examine if known work-related risk factors predict a group level estimate of bullying with the targets excluded from the analyses. Data included 2215 employees in 195 work groups from Sweden. Targets of bullying perceived the psychosocial working conditions more negatively compared to non-exposed colleagues. In addition, non-exposed in work groups with at least one target reported their working conditions more negatively than those working in groups free from bullying. Associations between examined working conditions and group levels of bullying were significant even when the targets were excluded from the analyses, albeit less strong. The results show that working conditions are risk factors of bullying, but also indicate that previous studies may have overestimated the associations. Future research should consider differences in perceptions of targets and non-targets when investigating work-related risk factors of bullying.

**Therkorn JH, Mathewson BA, Laursen CJ, Maberti S, Aizenberg V, Dinkelacker BT, et al. Methods to assess dermal exposures in occupational settings: a scoping review. *Annals of Work Exposures and Health*. 2024; 68(4):351-365.**

<https://doi.org/10.1093/annweh/wxae015> [open access]

Abstract: OBJECTIVES: The dermal exposure route is expected to become increasingly significant relative to total worker exposure as inhalational exposure limits continue to decrease. However, standardization of occupational exposure assessment methods and scientific consensus are needed. This is the first scoping review mapping the literature across all dermal exposure assessment methods and their targeted substances/chemicals in occupational settings. METHODS: Eligibility criteria broadly included studies reporting any noninvasive dermal exposure assessment method in an occupational setting. The literature search (Web of Science and MEDLINE) was restricted to peer-reviewed, primary literature published in the last 20 years (2002-2022). Titles/abstracts were dual independently screened. Data charting was performed by a single reviewer using standard template. All stages were pilot tested. The JBI (formerly, the Joanna Briggs Institute) scoping review methods and PRISMA-ScR checklist (Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews) were used. RESULTS: In total, 493 articles were data charted and



categorized by 4 study types: methods development (22%), exposure assessment (51%), health outcomes (21%), and controls assessment (6%). Fourteen types of dermal exposure assessment methods were charted with biomarkers (51%), dosimeters (21%), and qualitative assessments such as questionnaires or surveys (17%) most common. Seventeen different chemicals/substances were charted; pesticides (28%) and polycyclic aromatic hydrocarbons (PAHs) (22%) associated with crude oil products and combustion were most common. Mapping between substances and exposure assessment method categories, pesticide dosimeters (11%), and PAH biomarker studies (14%) were most reported. Literature gaps were identified for cleaning agents, hair dyes, glycol ether, N,N-dimethylformamide/N-methyl-2-pyrrolidone, dioxins, and bisphenol A. CONCLUSIONS: To foster scientific consensus, standardization across study reporting is needed for describing: (i) exposure assessment methods used, (ii) worker tasking/conditions, (iii) targeted substances and substance state, and (iv) targeted exposure routes. Overall, this review categorizes, maps, and defines the scope of literature for occupational dermal exposure assessment methods

**Van Waeyenberg T. Why do employees attend work sick? The assessment and relevance of opposite presenteeism motivations. *Journal of Occupational and Organizational Psychology*. 2024; 97(2):536-554.**

<https://doi.org/10.1111/joop.12481> [open access]

Abstract: Presenteeism, the act of attending work while sick, has gained significant research attention. However, the motivations driving this behaviour remain underexplored. This study seeks to contribute to this area by developing and validating a measurement tool that captures two distinct motivations for presenteeism: voluntary, stemming from personal choice, and involuntary, resulting from external pressures. Across four studies involving 1021 respondents from both the general working population and contexts known for high levels of presenteeism, the reliability and validity of an 8-item presenteeism motivation scale were established. Studies 1 and 2 confirmed the scale's two-factor structure and reliability. Study 3 further demonstrated its convergent, concurrent, and discriminant validity, as well as its ability to detect anticipated sex differences in presenteeism tendencies. Study 4 provided evidence towards criterion related validity, showing differential effects on employee well-being over time. Voluntarily presenteeism was associated with higher levels of work engagement and lower burnout rates, while involuntary presenteeism exhibited the opposite pattern. Additionally, the scale demonstrated measurement invariance across different working populations. The theoretical and managerial implications of these findings are discussed.

**Wang C, Lu EY, Sun W, Chang JR, and Tsang HWH. Effectiveness of interventions on sedentary behaviors in office workers: a systematic review and meta-analysis. *Public Health*. 2024; 230:45-51.**

<https://doi.org/10.1016/j.puhe.2024.02.013> [open access]

Abstract: Objectives: Various interventions have sought to break sedentariness among office workers, but their pooled effect on sitting time reduction remains unknown. Also, it is essential to compare the effectiveness of different intervention types. Study design: Systematic review and meta-analysis. Methods: A literature search was conducted in the PubMed, EMBASE, Scopus, Web of Science, MEDLINE (via EBSCO), PsycINFO, and Cochrane Library databases from inception to May 2, 2023. Two independent reviewers screened eligibility, extracted data, and assessed the risk of bias using the Cochrane risk of bias tool 2.0. Randomized controlled trials aiming to reduce sitting at work were included. The primary outcome was sitting time at work per day. The secondary outcomes included

cardiometabolic risk factors, psychological well-being, and work engagement. A random effects model was performed to synthesize continuous data as mean differences with 95% confidence intervals (95% CIs). Results: Twenty-four studies with 3169 participants were included. All intervention types in combination significantly reduced workplace sitting by 38 min per workday (95% CI: -47.32 to -28.72;  $P < 0.001$ ;  $I^2 = 49.78\%$ ). Interventions using environmental support (ES), motivational strategies (MS), or multiple components (multi) had all shown a significant reduction in work-time sedentary behavior (SB) relative to control groups. Regarding secondary outcomes, no significant effects were observed in physical or psychological outcomes besides high-density lipoprotein. Conclusions: Findings suggest that SB reduction interventions are generally effective for reducing workplace sitting. Multi interventions with both ES and MS are recommended for future clinical applications. Future studies should aim not only to reduce SB but also to attain the benefits of SB reduction interventions on physical and psychological well-being.

**Yoo H, Yang M, Song JH, Yoon JH, Lee W, Jang J, et al. Investigation of working conditions and health status in platform workers in the Republic of Korea. *Safety and Health at Work*. 2024; 15(1):17-23.**

<https://doi.org/10.1016/j.shaw.2024.01.002> [open access]

**Abstract:** BACKGROUND: The present study aimed to analyze several aspects of the working conditions and health status of platform workers in the Republic of Korea, such as ergonomic and emotional hazards. We also compared the health status of the platform workers with that of the general population. METHODS: A total of 1,000 platform workers participated in this survey from August 7 to August 17, 2022. The participants included 400 designated drivers, 400 food-delivery drivers, and 200 housekeeping managers. A face-to-face survey with a structured questionnaire was conducted by researchers who had received specific instructions. The focus of the survey extended to the work environment, encompassing factors such as workplace violence, as well as physical, chemical, and ergonomic hazards. Health-related data for the previous year were also collected, covering a range of issues such as hearing problems, skin problems, musculoskeletal symptoms, headaches, injuries, mental health issues, and digestive problems. Subsequently, we compared the health symptom data of the responders with those of the general population in the Republic of Korea. RESULTS: Platform workers, including designated drivers, food-delivery drivers, and housekeeping managers, existed in the blind spot of social insurance, facing frequent exposure to physical and chemical hazards, ergonomic risk factors, and direct or indirect violence. The prevalence of health problems, including musculoskeletal symptoms, general fatigue, and depressive symptoms, in each occupational group was statistically higher than that in the general population after standardization for age and gender. CONCLUSION: The results revealed unfavorable working environment and inferior occupational health of platform workers compared with those of the general population

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