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

***MacLean MB, Wolfson C, Hewko S, Tompa E, Sweet J, and Pedlar D. Predictors of retirement voluntariness using Canadian longitudinal study on aging data. *Journal of Aging and Health*. 2025; 37(1-2):75-95.**

<https://doi.org/10.1177/08982643241229760> [open access]

Abstract: Objectives: Involuntary exit from the labor force can lead to poor health and well-being outcomes. Therefore, the purpose of this research is to better understand the factors that contribute to perceived retirement voluntariness. Methods: We conducted descriptive and multivariable logistic regression analyses using a sample of recent retirees (n = 2080) from the Canadian Longitudinal Study on Aging (CLSA). Results: More than one-quarter (28%) of older workers perceived their retirement to be involuntary. Among 37 possible predictors, 14 directly predicted retirement voluntariness and many more indirectly predicted retirement voluntariness. Only four direct predictors were common to both women and men, retiring because of organizational restructuring/job elimination; disability, health, or stress; financial possibility; and having wanted to stop working. Discussion: Findings suggest the need for employment support, health promotion, work disability prevention, financial education, and support that is sensitive to the differences between women and men to prevent involuntary retirement

Aula M, Silver K, Abulhassan Y, Andino A, and Hoffman K. Evaluation of tomato farmworker upper limb ergonomic risk factors. *Archives of Environmental & Occupational Health*. 2024; 79(5-6):209-221.

<https://doi.org/10.1080/19338244.2024.2419122>

Abstract: Research on musculoskeletal disorders among tomato farmworkers is limited. This pilot study aims to generate insights and preliminary data on tasks performed by tomato farmworkers at a demonstration test plot, evaluating associated ergonomic risk factors. A

demonstration test plot was constructed to simulate tasks performed by tomato farmworkers. Muscle activity in the anterior deltoid and upper trapezius was measured using surface electromyography (sEMG) and compared among tasks. The intensity of physical activity during stake pounding, bucket tossing, and tying tasks was monitored using a GT9X activity monitor. Non-parametric ANOVA revealed that the upper trapezius exhibited the highest muscle activity in all tasks ($p < 0.05$). Stake pounding showed the highest muscle activity, peak loads, and the most intense physical activity. Future studies will focus on assessing tomato farmworker activities over longer shifts and evaluating the impact of posture, fatigue, and energy expenditure on the risk for musculoskeletal disorders.

Brodin H and Shanks E. Effects of organisational factors and employee characteristics on employers' reporting of client violence in non-institutional social services in Sweden. *Social Policy & Administration*. 2024; 58(7):1009-1024.

<https://doi.org/10.1111/spol.13009> [open access]

Abstract: Abstract Social services in the welfare sector consist of women-dominated jobs generally characterised by arduous working conditions, including exposure to client violence. Although there is a rather extensive research base on client violence in institutional social services, less is known about how client violence is handled in noninstitutional social services. Using longitudinal data obtained from the Swedish Work Environment Agency's register on work injuries caused by workplace violence, we examined the effects of organisational factors and employee characteristics on the reporting of client violence in noninstitutional social services. We found that most of the reports about work injuries caused by client violence are filed by public employers and that most reports concern occupational groups performing direct care services in clients' homes. Moreover, although most reports include female employees and incidents of physical violence, reports concerning male employees are comparatively more likely to include physical violence, and reports concerning female employees are comparatively more likely to include threats. Taken together, our findings point to a much-needed improvement of health and safety measures for care workers in noninstitutional social services in Sweden

Chaudhry ZS and Choudhury A. Clinical applications of artificial intelligence in occupational health: a systematic literature review. *Journal of Occupational & Environmental Medicine*. 2024; 66(12):943-955.

<https://doi.org/10.1097/JOM.0000000000003212>

Abstract: OBJECTIVES: The aims of the study are to identify and to critically analyze studies using artificial intelligence (AI) in occupational health. METHODS: A systematic search of PubMed, IEEE Xplore, and Web of Science was conducted to identify relevant articles published in English between January 2014-January 2024. Quality was assessed with the validated APPRAISE-AI tool. RESULTS: The 27 included articles were categorized as follows: health risk assessment ($n = 17$), return to work and disability duration ($n = 5$), injury severity ($n = 3$), and injury management ($n = 2$). Forty-seven AI algorithms were utilized, with artificial neural networks, support vector machines, and random forest being most common. Model accuracy ranged from 0.60-0.99 and area under the curve (AUC) from 0.7-1.0. Most studies ($n = 15$) were of moderate quality. CONCLUSIONS: While AI has potential clinical utility in occupational health, explainable models that are rigorously validated in real-world settings are warranted

Devane D, Hamel C, Gartlehner G, Nussbaumer-Streit B, Griebler U, Affengruber L, et al. Key concepts in rapid reviews: an overview. *Journal of Clinical Epidemiology*. 2024; 175:111518.

<https://doi.org/10.1016/j.jclinepi.2024.111518> [open access]

Abstract: BACKGROUND AND OBJECTIVE: Rapid reviews have gained popularity as a pragmatic approach to synthesize evidence in a timely manner to inform decision-making in healthcare. This article provides an overview of the key concepts and methodological considerations in conducting rapid reviews, drawing from a series of recently published guidance papers by the Cochrane Rapid Reviews Methods Group. STUDY DESIGN AND SETTING: We discuss the definition, characteristics, and potential applications of rapid reviews and the trade-offs between speed and rigor. We present a practical example of a rapid review and highlight the methodological considerations outlined in the updated Cochrane guidance, including recommendations for literature searching, study selection, data extraction, risk of bias assessment, synthesis, and assessing the certainty of evidence. RESULTS: Rapid reviews can be a valuable tool for evidence-based decision-making, but it is essential to understand their limitations and adhere to methodological standards to ensure their validity and reliability. CONCLUSION: As the demand for rapid evidence synthesis continues to grow, further research is needed to refine and standardize the methods and reporting of rapid reviews

Fulton-Kehoe D, Haight J, Elmore A, Sears JM, Wickizer T, and Franklin GM. Association between pre-injury opioid use and opioid use patterns after a work injury. *American Journal of Industrial Medicine*. 2024; [epub ahead of print].

<https://doi.org/10.1002/ajim.23683>

Abstract: Background: Few studies have assessed long-term opioid prescribing after a work-related injury. There is limited information about opioid prescriptions before an injury and how receipt of opioids before a work injury is associated with long-term opioid prescribing. We present patterns of long-term opioid prescription among workers after an injury, overall, and by pre-injury opioid use. Methods: We used linked workers' compensation and prescription drug monitoring program (PDMP) data to identify workers injured between July 2019 and June 2020 with an opioid prescription dispensed within 6 weeks after injury. Opioid prescribing was assessed for the 3 months before injury and for 1 year after injury or claim closure, whichever came first. Results: Among injured workers with an opioid in the first 6 weeks, 23% had opioids 6-12 weeks after injury, 19% had opioids 3-6 months, 14% had opioids 6-9 months, and 12% had opioids 9-12 months after injury; 19% had opioids in the 3 months before injury. For workers with opioid prescription prior to injury, the percentage with opioids 9-12 months after injury was 34%, versus 7% among workers with no opioids in the 3 months before injury ($p < 0.001$). Receipt of chronic opioids (for at least 60 days) 9-12 months after injury was substantially higher among those with prior opioid prescription (20%) than in those with no prior opioids (0.4%) ($p < 0.001$). Conclusions: We found a strong relationship between opioid prescription in the 3 months before a work injury and opioid prescribing after an injury. Healthcare providers should be vigilant to the important relationship between prior opioid use and longer-term opioid use after work-related injuries.

Ghazala S, Veluswamy SK, Ravindra S, Arena R, and Myers J. Efficacy of mhealth-based workplace health promotion strategy in improving cardiorespiratory fitness in a healthcare setting: a randomized controlled study. *Journal of Occupational & Environmental Medicine*. 2024; 66(12):1083-1090.

<https://doi.org/10.1097/JOM.0000000000003229>

Abstract: OBJECTIVE: This study aimed to test the efficacy of a mHealth-based workplace health promotion strategy in improving cardiorespiratory fitness in a healthcare setting. METHODS: Seventy-seven female nurses (age, 30-45 years) meeting the inclusion criteria underwent baseline assessment and received either a 12-week mHealth or awareness intervention based on their workplace. Changes in peak oxygen consumption (VO_2), fasting blood sugar, and physical activity were compared within and between the groups at the end of the intervention. RESULTS: Thirty-seven and 33 participants in the mHealth and awareness arms, respectively, completed the 12-week intervention. Peak VO_2 (1.6 mL/kg/min, 7%), physical activity, and step counts improved significantly in the mHealth arm. However, between-group differences were not significant. CONCLUSIONS: mHealth interventions offer unique opportunities to improve physical activity and cardiorespiratory fitness among health professionals in their workplace

Golz C, Hagerbaumer M, Gerlach M, Meichtry A, Kilcher G, Peter KA, et al. Explaining presenteeism behaviour with the theory of planned behaviour: a longitudinal study. *International Archives of Occupational & Environmental Health*. 2024; 97(10):1051-1062.

<https://doi.org/10.1007/s00420-024-02108-5> [open access]

Abstract: PURPOSE: This study uses the Theory of Planned Behaviour (TPB) to explore presenteeism, where individuals work despite being ill. The research seeks to understand how attitudes, subjective norms, and perceived behavioural control are associated with presenteeism behaviours. METHODS: A longitudinal design was employed, involving 2814 employees from 16 companies. Data were collected using a survey on two measurement points, which included validated scales and vignettes to assess attitudes toward presenteeism. The data were analysed using cluster analysis and a linear mixed effects regression to evaluate the TPB model. RESULTS: Three clusters of attitudes toward presenteeism were identified through cluster analysis. The model explained 27.8% of the variance in the fixed effects and 52.6% in the combined fixed and random effects. The regression model found associations between presenteeism and factors such as quantitative demands, work-privacy conflict, and leadership culture. Attitudes towards presenteeism were a strong predictor, with specific clusters showing differing propensities to work while ill. CONCLUSION: The study confirms the suitability of the TPB in explaining presenteeism. It highlights the importance of individual attitudes, subjective norms, and perceived behavioural control in shaping presenteeism. The findings suggest that promoting a health-supportive workplace culture, including open communication about illness, might reduce presenteeism

Guo X, Chen Y, Zhang J, and Hubbard B. A new framework for exploration of transportation maintenance-related prevalent work injuries, hazardous activities, and effectiveness of ergonomic solutions in the United States. *Theoretical Issues in Ergonomics Science*. 2024; 25(6):753-775.

<https://doi.org/10.1080/1463922X.2024.2337686>

Krause JS, Dismuke-Greer CE, Reed K, and Jarnecke M. Characteristics associated with perceived underemployment among participants with multiple sclerosis. *Rehabilitation Counseling Bulletin*. 2024; 68(1):3-12.

<https://doi.org/10.1177/00343552231187592>

Lefcoe AD, Connelly CE, and Gellatly IR. Ride-hail drivers, taxi drivers and multiple jobholders: who takes the most risks and why? *Work, Employment and Society*. 2024; 38(5):1307-1332.

<https://doi.org/10.1177/09500170231185212> [open access]

Abstract: Little is known about how the use of ride-hail apps (e.g. Uber, Lyft) affects drivers' propensity to engage in risky behaviours. Drawing on labour process theory, this study examines how algorithmic control of ride-hail drivers encourages risky driving (i.e. violating road safety rules, carrying weapons). Furthermore, the theory of work precarity is used to explain why multiple jobholders (MJHers), who work for ride-hail companies, drive taxis and hold other jobs, may be more likely to take risks while driving due to income insecurity and erratic work hours. The hypotheses are tested in a sample (N = 191) of ride-hail drivers, taxi drivers and MJHers. The results suggest that MJHers are more likely to engage in risky driving in comparison to ride-hail and taxi drivers. Theoretical, practical and policy implications are discussed

Paul KI, Zechmann A, Mlynek M, Stiglbauer B, Batinic B, Moser K, et al. Testing the incongruence model with longitudinal data: how employment status preferences affect mental health over time. *Journal of Occupational and Organizational Psychology*. 2025; 98(1):1-26.

<https://doi.org/10.1111/joop.12562> [open access]

Abstract: According to the incongruence model, unemployed people experience incongruence between their actual as compared to their desired employment status, which is an important source of distress. In contrast to other theories, this model is able to explain why unemployed people feel worse not only compared to employed people but also compared to people in other life situations, such as students, homemakers and retirees, who are assumed to experience low levels of incongruence. The current study analysed two longitudinal samples (n = 1066 and n = 1036 at T1) that were followed over 2.5 and 1.5 years, with six and five measurement points, respectively. The results show that (1) unemployed people who found new jobs experienced a reduction in their incongruence levels; (2) changes in incongruence were associated with changes in mental health; (3) changes in incongruence mediated the effects of changes in employment status on mental health. In addition, (4) mental health changes associated with other employment status changes such as entering (or leaving) the labour force (i.e., becoming a student, homemaker or retiree) were also mediated by changes in incongruence levels. Furthermore, the effects remained stable when the influence of the latent and manifest functions of employment was controlled.

Poirier S, Gendron P, Houle J, and Trudeau F. A prospective study of health-related lifestyle changes among police cadets. *Archives of Environmental & Occupational Health*. 2024; 79(5-6):167-176.

<https://doi.org/10.1080/19338244.2024.2402723>

Abstract: The objectives of this prospective study were to explore the health-related lifestyle of police cadets and assess changes in their health behaviors following entry into the police

force. To do so, 190 police cadets completed an online questionnaire assessing their physical activity level, sedentary behaviors, diet quality, sleep hygiene, alcohol consumption, cigarette smoking, and stress level. One year following their graduation from the police training program, participants were invited to, once again, complete the questionnaire. Our results suggest that police cadets generally display healthy lifestyles, with very few cadets being physically inactive, smokers, reporting insufficient sleep duration, and displaying obesity. Nevertheless, paired-sample comparisons highlighted significant decreases in physical activity, fruit and vegetable intake, sleep duration, and sleep quality at the follow-up. Likewise, significant increases in fast-food consumption and BMI were observed

Riopel C, Trudel X, Milot A, Laurin D, Gilbert-Ouimet M, and Brisson C. Effort-reward imbalance at work assessed at midlife and prediabetes prevalence assessed 18 years later in a prospective cohort of white-collar workers. *Annals of Work Exposures and Health*. 2024; 68(9):940-950.

<https://doi.org/10.1093/annweh/wxae071> [open access]

Abstract: OBJECTIVES: Evidence suggests that workers exposed to psychosocial stressors at work from the effort-reward imbalance (ERI) model are at increased risk for type 2 diabetes mellitus (T2DM). However, evidence about the effect of ERI on prediabetes is scarce. This study aimed to examine the association between effort-reward imbalance at work, glycated hemoglobin level and the prevalence of prediabetes in women and men from a prospective cohort study. METHODS: This study was conducted among 1354 white-collar workers followed for an average of 18 years. Effort-reward imbalance at work was measured in 1999 to 2001 using a validated instrument. Glycated hemoglobin was assessed at follow-up (2015 to 2018). Differences in mean glycated hemoglobin levels were estimated with linear models. Prediabetes prevalence ratios (PRs) were computed using robust Poisson regression models. RESULTS: In women, those exposed to effort-reward imbalance at work at baseline had a higher prevalence of prediabetes (PR = 1.60, 95% confidence interval: 1.02-2.49) at follow-up following adjustment for sociodemographic, lifestyle-related, clinical, and other occupational risk factors. There was no difference in mean glycated hemoglobin levels. CONCLUSION: Among women, effort-reward imbalance at work at midlife was associated with the prevalence of prediabetes, at older age. Preventive workplace interventions aiming to reduce the prevalence of effort-reward imbalance at work may be effective to reduce the prevalence of prediabetes among women

Rosengren C, Backlander G, and Palm K. Daily habits and work-life boundary control: telework in the era of COVID-19. *Nordic Journal of Working Life Studies*. 2024; 14(4):23-47.

<https://doi.org/10.18291/njwls.146338> [open access]

Abstract: Telework has had a dramatic increase worldwide, especially in the Nordic countries. When work is conducted in the domestic area, the boundaries between work and private life easily become blurred. In this paper, we investigate the daily habits of Swedish municipal office workers as they worked from home during the pandemic with the aim to understand the role of habits in upholding boundaries between work and non-work. Our results indicate that habits from the workplace were sometimes disrupted, and other times transferred to the domestic area. We also saw examples of the establishment of new habits that helped to facilitate role transitions between work and non-work roles, so-called 'transitional habits'. Our

main contribution is to show how the establishment of daily transitional habits can alleviate role shifts and thus help to keep work and non-work roles boundaries separate and distinct.

Shi X, Liu Z, Zhang M, Hua W, Li J, Lee JY, et al. Quantitative bias analysis methods for summary-level epidemiologic data in the peer-reviewed literature: a systematic review. Journal of Clinical Epidemiology. 2024; 175:111507.

<https://doi.org/10.1016/j.jclinepi.2024.111507>

Abstract: OBJECTIVES: Quantitative bias analysis (QBA) methods evaluate the impact of biases arising from systematic errors on observational study results. This systematic review aimed to summarize the range and characteristics of QBA methods for summary-level data published in the peer-reviewed literature. STUDY DESIGN AND SETTING: We searched MEDLINE, Embase, Scopus, and Web of Science for English-language articles describing QBA methods. For each QBA method, we recorded key characteristics, including applicable study designs, bias(es) addressed; bias parameters, and publicly available software. The study protocol was preregistered on the Open Science Framework (<https://osf.io/ue6vm/>). RESULTS: Our search identified 10,249 records, of which 53 were articles describing 57 QBA methods for summary-level data. Of the 57 QBA methods, 53 (93%) were explicitly designed for observational studies, and 4 (7%) for meta-analyses. There were 29 (51%) QBA methods that addressed unmeasured confounding, 19 (33%) misclassification bias, 6 (11%) selection bias, and 3 (5%) multiple biases. Thirty-eight (67%) QBA methods were designed to generate bias-adjusted effect estimates and 18 (32%) were designed to describe how bias could explain away observed findings. Twenty-two (39%) articles provided code or online tools to implement the QBA methods. CONCLUSION: In this systematic review, we identified a total of 57 QBA methods for summary-level epidemiologic data published in the peer-reviewed literature. Future investigators can use this systematic review to identify different QBA methods for summary-level epidemiologic data

Wang J, Zhang L, Luo H, and Mumtaz AH. Binary work stressors and work procrastination: the mediating role of work attentiveness and emotional exhaustion and the moderating role of regulatory focus. International Journal of Stress Management. 2024; 31(4):392-405.

<https://doi.org/10.1037/str0000339>

Williams AA and Marc J. Traumatic workplace injuries: a cross-sectional analysis of OSHA severe injury reports, including the impacts of seasonality and COVID-19 from 2015 to 2022. Journal of Safety Research. 2024; 91:38-49.

<https://doi.org/10.1016/j.jsr.2024.08.004>

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