

This Workplace Research Monthly includes the latest peer-reviewed articles, reports and evidence on a range of workplace health and safety, prevention, recovery at work and return to work topics that were published in July 2025 only.

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Description of Evidence Levels Definitions Used in this Review

Level of Evidence – Comcare does not conduct critical evaluations of the articles listed in the Workplace Research Monthly, however, certain study designs are scientifically stronger at answering a question. The scoring hierarchy we provided is presented below.

Level of Evidence	Description
Level 1	Evidence from a systematic/scoping review or meta-analysis of relevant studies.
Level 2	Evidence from a randomised controlled trial.
Level 3	Evidence from a controlled intervention trial without randomisation (i.e. quasi-experimental).
Level 4	Evidence from a case-control or cohort study.
Level 5	Evidence from a single case study, a case series, or qualitative study.
Level 6	Evidence from opinion pieces, reports of expert committees and/or from literature reviews.

1. Relevance – Research carried out in Australia or similar countries is most relevant to Australian readers.

Level	Description
A	Study conducted in Australia or the study has been conducted outside Australia but confounders unlikely to affect relevance
B	Study conducted outside Australia and confounders likely to affect generalisability

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Enabling Healthy and Safe Workplaces

Health and Wellbeing

Investigation of the usage of machine learning to explore the impacts of climate change on occupational health: A systematic review and research agenda

Occupational accidents can be potentialized by factors related to the workplace or the environment, such as climatic conditions. Air temperature, wind speed, and humidity can be used to monitor occupational heat stress, leading to cramps, exhaustion, stroke, and even death. Under the climate change scenario, measuring these variables is fundamental to developing adaptation strategies for maintaining the workers' well-being. However, when dealing with this high data volume from distinctive factors, traditional techniques are insufficient to extract all information effectively. Therefore, computational intelligence and data analytics tools can enhance data processing and analysis. Machine learning techniques have been successfully applied to occupational health and climate contexts. This paper explores the literature regarding applying these techniques to investigate the effects of climate change on occupational health. We conducted a systematic review through five scientific databases guided by three research questions, resulting in 24 selected papers. 75% of the papers screened used primary data collected from wearable sensors to monitor the well-being of workers, where we identified a trend of using supervised machine learning techniques, especially classification and regression algorithms, such as SVM, RF, and KNN. The remaining focus is on using secondary data from national databases to investigate the risk, with a trend of using feature selection techniques and classification tasks. Considering this topic is relatively new, we developed an agenda to guide future research, with suggestions to follow the trends found in this review and highlight the potential of expanding to multiple future research paths.

Ferrari et al. 2025.

Frontiers in Public Health, vol. 13.

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Keywords: Climate change; heat stress; machine learning; occupational health and safety; supervised learning.

Evidence Level: 1A

Link: <https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2025.1578558/full>

The mediating role of safety behavior in the relationship between safety climate and safety outcomes among sanitary workers in Pakistan

Introduction: Sanitary workers are regarded as the foundation of society due to their essential role in maintaining cleanliness and hygiene. In Pakistan, sanitation tasks are conducted manually, resulting in adverse health consequences for workers. **Objective:** This research intends to investigate the relationship between safety climate and safety outcomes among sanitary workers along with the mediating influence of safety behaviour. **Methods:** The data was collected from two sanitation organizations in Punjab, Pakistan. The data was subsequently analysed using SPSS version 27.0 and SmartPLS version 4. The participants were chosen from the cantonment board Attock and Lahore management company using a simple random sampling technique. **Results/conclusion:** The findings revealed that safety climate and its dimensions such as management commitment, safety communication learning trust, and work environment have a significant positive relationship with safety outcomes. Similarly, safety behaviour significantly mediates the relationship between safety climate, dimensions and safety outcomes.

Nisar et al. 2025.

Frontiers in Public Health, vol. 13.

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Keywords: SmartPLS; multistage sampling; safety behavior; safety climate; safety outcomes.

Evidence Level: 4B

Link: <https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2025.1591691/full>

Positive relationship between work-to-sleep hours ratio and obesity: A cross-sectional study, evidence from NHANES 2017-2023

Background: Current approaches relying solely on work hours or sleep hours often fall short in comprehensively assessing health risks. To address this gap, this study introduces a novel metric: the Work-to-Sleep hours Ratio (WSR). The study aims to investigate the relationship between WSR and obesity.

Objective: To investigate the correlation between WSR and obesity. **Methods:** We employed data from 7,847 participants in the National Health and Nutrition Examination Survey (NHANES) 2017-2023. Data collected from all participants included demographic variables, health-related metrics and the presence of various health conditions. Logistic regression analysis, Restricted Cubic Spline (RCS) analysis, and interaction effects were employed to support the research objectives. **Results:** In the final model of multivariate analysis showed positive relationship between WSR and obesity (OR = 1.54, 95% CI: 1.33-1.77, $p < 0.001$). Additionally, multivariate smooth splines analysis indicated that WSR exhibited a significant inverted L-shaped nonlinear relationship with obesity (P for nonlinearity < 0.05). **Conclusion:** The study observed a positive correlation between WSR and obesity, highlighting the importance of considering both work and sleep hours in assessing public health risks.

Zhou 2025.

Frontiers in Public Health, vol. 13.

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Keywords: NHANES; Work-to-Sleep hours Ratio; obesity; sleep hours; work hours.

Evidence Level: 4B

Link: <https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2025.1616890/full>

Occupational fall incidence associated with heated tobacco product use and lifestyle behaviors in Japan

This study identifies the association between heated tobacco product (HTP) use and occupational falls, considering lifestyle variables. A nationwide web-based cross-sectional study between September and November 2023 analysed data from 18,440 workers in Japan (mean age: 43 years; women: 43.9%). The primary outcome was the occupational falls in the past year. The secondary outcome was fall-related fractures. Participants were categorized as those who never used, those who formerly used, and those who currently used tobacco products; the lattermost were further classified according to the product used. Other behavioural factors included alcohol consumption, sleep duration, physical activity, comorbidities, body mass index, hypnotics/anxiolytic use, and sociodemographic variables. Overall, 7.3% participants reported occupational falls, and 2.8% reported fall-related fractures. Occupational fall incidence was higher for those who currently smoked (IR: 1.36, 95% CI: 1.20-1.54), particularly those who exclusively used HTPs (IR: 1.78) and those who used both conventional cigarettes and HTPs (IR: 1.64), than for those who never smoked. Fall-related fractures showed similar trends. Short sleep duration and diabetes were associated with increased fall risk, particularly among younger workers. These findings highlight the significant association between HTP use, lifestyle behaviours, and occupational falls.

Tsushima et al. 2025.

Scientific Reports, vol. 15, no. 1.

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Keywords: Bone fractures; heated tobacco product; occupational falls; smoking; workplace.

Evidence Level: 4B

Link: <https://www.nature.com/articles/s41598-025-05204-9>

Work stressors and asthma in female and male US workers: Findings from the National Health Interview Survey

Background: Prior work has linked work stressors to asthma. However, research related to gender-specific associations remains sparse and yielded mixed results. We aimed to address this gap. **Methods:** We drew on cross-sectional data from the 2015 National Health Interview Survey (individual-level response rate = 79.7%). Included were participants in employment who were aged 18-70 ($n = 18,701$). Work-to-family conflict, workplace bullying, and job insecurity were assessed as work stressors. Asthma was defined based on self-reports of a lifetime diagnosis by a doctor or other health professional. To account for the complex sampling design, variance estimation was used to compute weighted descriptive statistics and odds ratios

(ORs) as well as corresponding 95% confidence intervals (CIs) using multivariable logistic regression. To test for interaction, interaction terms for work stressors and gender were included in additional models.

Results: In the full sample, work-to-family conflict, workplace bullying and job insecurity showed positive associations with asthma (OR = 1.20, 95%CI = 1.03-1.40; OR = 1.45, 95%CI = 1.17-1.80; and OR = 1.20, 95%CI = 0.99-1.45, respectively). We did not observe meaningful gender differences in the magnitudes of the ORs. All interaction terms were not statistically significant. **Conclusions:** Work stressors were positively associated with asthma, but there was no evidence of gender differences. Prospective studies are needed to determine the potential temporal relation of these associations.

Loers et al. 2025.

American Journal of Industrial Medicine, vol. 68, no. 6.

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Keywords: USA; asthma; epidemiology; job insecurity; occupational stress; workplace bullying; work–family conflict.

Evidence Level: 4B

Link: <https://onlinelibrary.wiley.com/doi/10.1002/ajim.23722>

Demands and resources of a long-standing bring-your-dog-to-work program: A constant comparative analysis

Introduction: Given the evidence that companion animals may provide social and emotional support to their human counterparts, some companies have begun offering bring-your-dog-to-work programs in an effort to reduce employee strain and improve workplace wellness outcomes. The purpose of this qualitative study was to investigate how a long-standing bring-your-dog-to-work program at a large midwestern university veterinary college, the Dogs at Work Program, impacted the workplace well-being of program participants. **Methods:** A total of $n = 11$ staff and faculty members who participated in the program completed semi-structured interviews about their experiences. Interviews were analysed using the constant comparative technique. **Results:** Constant comparative analysis revealed four themes situated within a job demands-resources theoretical framework: (1) Dogs providing emotional support as a resource, (2) Dogs providing social support as a resource, (3) Increased responsibility as a demand, and (4) Lack of adherence to program rules as a demand. Results indicated that bringing pet dogs into the workplace was viewed positively because the dogs provided an impetus for pleasant breaks from stressful work, improved work-life balance, and helped to develop and enhance social relationships. On the other hand, participants also mentioned that dogs could be a distraction from workplace productivity, especially if they were poorly behaved. **Discussion:** Well-enforced policies for dog activity and behaviour are critical to ensure that dogs at work do not diminish productivity or upset some employees. Nevertheless, bring-your-dog-to-work-programs appear to show promise in terms of reducing strain and may be linked to improved mental health outcomes.

Schieler et al. 2025.

Frontiers in Public Health, vol. 13.

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Keywords: Bring-your-dog-to-work; job demands-resources model; mental health; organizational belonging; work-life balance; workplace wellness.

Evidence Level: 5B

Link: <https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2025.1576360/full>

Workplace perk or pitfall? A qualitative study of genetic counsellors' perspectives and experiences with workplace genetic testing

Some employers offer genetic testing for increased cancer and cardiovascular disease risk, as well as pharmacogenetic variants, as a wellness benefit, which presents unique considerations for genetic counselling. Our ethical, legal, and social implications (ELSI) of genomics study, positioned in a post-positivist paradigm, aimed to qualitatively assess the perspectives and experiences of genetic counsellors (GCs) who had counselled on workplace genetic testing (wGT). Semi-structured interviews were conducted with 18 US GCs who either worked in the wGT industry (i.e., role-directed wGT experience) or provided

post-test counselling in a clinical setting (i.e., patient-directed wGT experience). Interviews were analysed following the principles of codebook thematic analysis using a codebook developed from key domains from the interview guide and emergent themes that were identified during data collection. De-identified transcripts were double-coded. Both role-directed and patient-directed GCs recognized the potential benefits of wGT such as increasing access to genetic services and thereby improving health outcomes. However, patient-directed GCs had more concerns about the lack of access to follow-up care and increasing healthcare disparities. Role-directed GCs were generally more supportive of wGT and were more likely to endorse the benefits. Overall, both role- and patient-directed GCs emphasized the need for guardrails, particularly adequate pre- and post-test education, to mitigate potential harms of wGT, such as lack of informed decision-making, psychological distress, false reassurance, and decisional regret. GCs spontaneously drew parallels between wGT and population genomic screening efforts, noting that wGT similarly attempts to increase access to genetic testing for the general population. GCs' perspectives on strategies to maximize the benefits and minimize the harms of wGT may inform ELSI considerations when developing population genomic screening efforts and other programs that aim to expand access to genetic testing for the general population.

Charnysh et al. 2025.

Journal of Genetic Counseling, vol. 34, no. 3.

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Keywords: Consumer genetics; genetic counseling; genetic testing; population screening; qualitative research; workplace wellness programs.

Evidence Level: 5B

Link: <https://onlinelibrary.wiley.com/doi/10.1002/jgc4.70016>

Work Health and Safety

Risk and causative factors of psychological harm among construction workers: A systematic review

Background: The construction industry, known for its high-risk environment, increasingly acknowledges the psychological risks to workers. Despite well-documented physical hazards, mental health challenges within this workforce have garnered attention. This systematic review provides a scholarly synthesis of literature on psychological risks and their causative factors affecting construction workers, adhering to PRISMA protocols. **Methods:** An exhaustive literature search was conducted across PubMed, Scopus, PsycINFO, and Google Scholar using relevant keywords. Rigorous screening of selected studies focused on the psychological aspects of construction work, with systematic data extraction and analysis. **Findings:** From 1992 to 2022, 68 studies met inclusion criteria, identifying key psychological harm factors: job insecurity, long working hours, high demands, poor work-life balance, and workplace bullying. A lack of mental health support and awareness in the sector was noted, with a significant correlation between these factors and increased stress, anxiety, and depression levels among workers. **Conclusions:** The review highlights the urgent need for industry recognition of psychological hazards and the relationship between work conditions and mental health issues. It calls for supportive policies, awareness programs, and counselling services, with a suggestion for future longitudinal research on the long-term impacts and intervention efficacy. **Application to practice:** This study provides an overview of psychological risks in the construction sector from 1994 to 2022, aiming to identify causative factors for mental health issues. It seeks to pave the way for targeted interventions and policy changes to improve mental health outcomes in the industry.

Rahman et al. 2025.

Workplace Health and Safety, vol. 73, no. 6.

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Keywords: Construction industry; mental health; psychological risks; workplace wellbeing.

Evidence Level: 1A

Link: <https://journals.sagepub.com/doi/full/10.1177/21650799241303529>

Systematic review of workplace interventions to support young workers' safety, work environment and health

Purpose: This systematic review investigates the effectiveness of workplace interventions to support young workers' work environment, safety and health. **Methods:** A systematic search was conducted in bibliographic databases including PubMed, Web of Science Core Collection and PsycINFO for English or Scandinavian articles published from 2007 to 2022. The PICO strategy guided the assessment of study relevance and the bibliographical search for randomized controlled trials (RCTs) and non-RCTs in which (1) participants were young workers (mean age: 15-29), (2) interventions were initiated and/or carried out at the workplace, (3) a comparison group was included, and (4) an outcome measure related to work environment, safety and health was reported. We categorized each included study using the intervention classification framework. The quality assessment and evidence synthesis adhered to the guidelines developed by the Institute for Work & Health (Toronto, Canada). **Results:** A total of 33 high and medium quality studies showed a moderate level of evidence for no benefit of 'Mental training' on stress. We found limited evidence of a positive effect of the following intervention types: 'Attitude and belief' on mental health problems, 'Behaviour based' on anxiety, and 'Multifaceted' on hand eczema. We found limited evidence for no benefit of the following intervention types: 'Mental training' on mental health problems, and 'Physiological modifications' on musculoskeletal disorders. The remaining intervention types showed mixed or insufficient evidence. **Conclusions:** Except for a moderate level of evidence for no benefit of 'Mental training' on stress, the evidence synthesis recommends, that there is not enough evidence from the scientific literature to guide current practices. The results emphasizes a strong need for high quality interventions specifically aiming at increasing or maintaining young workers' work environment, safety and health. Included studies focused mainly on individual measures, highlighting the need for studies investigating possible preventive measures at the group or organizational level.

Sundstrap et al. 2025.

Journal of Occupational Rehabilitation, vol. 35, no. 2.

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Keywords: Injuries; mental health; musculoskeletal disorders; occupational; stress; workers.

Evidence Level: 1A

Link: <https://link.springer.com/article/10.1007/s10926-024-10186-y>

The impact of workplace heat and cold on work time loss

Objective: We investigated the impact of workplace heat and cold on work time loss. **Methods:** Field experiments in different industrial sectors were conducted in multiple countries across all seasons between 2016 and 2024. Hundreds of workers were video recorded, and their full shifts (n = 603) were analysed on a second-by-second basis (n = 16,065,501 seconds). Environmental data were recorded using portable weather stations. The Workplace Environmental Labor Loss (WELL) functions were developed to describe work time loss due to workplace temperature. **Results:** The WELL functions revealed a U-shaped relationship whereby the least work time loss is observed at 18°C (64°F) and increases for every degree above or below this optimal temperature. **Conclusions:** The WELL functions quantify the impact of workplace temperature on work time loss, extending to temperatures previously believed to be unaffected.

Trial registration: ClinicalTrials.gov [NCT04160728](https://clinicaltrials.gov/ct2/show/study/NCT04160728).

Ioannou et al. 2025.

Journal of Occupational and Environmental Medicine, vol. 67, no. 6.

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Keywords: WBGT; capacity; labor; occupational; productivity; temperature.

Evidence Level: 4B

Link:

https://journals.lww.com/joem/fulltext/2025/06000/the_impact_of_workplace_heat_and_cold_on_work_time.2.aspx

Assessment of hand-arm vibration syndrome in Polish workers: Results from a questionnaire study

Hand-arm vibration syndrome (HAVS) is a significant occupational health issue, often diagnosed at an advanced stage. This study aimed to assess the prevalence of HAVS (vascular and neurological components) among men exposed to local vibrations in their workplace. A questionnaire survey was conducted among 326 men aged 25-45 years, each with at least 5 years of experience using vibration tools. Results indicated that nearly 40% of participants reported at least one symptom of HAVS, with symptoms being more common among those working with vibration tools for more than 10 years or more than 20 h per week. Notably, 75% of respondents believed they were well informed by their employers about the health risks of local vibrations, and workers who considered themselves well-informed reported symptoms more frequently than those who did not. These findings underscore the importance of self-awareness and education in the prevention and early detection of HAVS.

Łastowiecka-Moras 2025.

International Journal of Occupational Safety and Ergonomics, vol. 31, no. 2.

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Keywords: Hand–arm vibration syndrome; local vibrations; vascular–neural; vibration tools.

Evidence Level: 4B

Link: <https://www.tandfonline.com/doi/full/10.1080/10803548.2025.2471669#d1e1170>

Risk Assessment

Evaluation of a toolbox for the prevention of skin cancer among outdoor workers: An intervention study

Introduction: Due to ultraviolet radiation (UVR) exposure at work, outdoor workers face a higher risk of keratinocyte carcinoma (KC) than indoor workers. This study evaluates the short-term effectiveness of a sun-safety risk communication toolbox aimed to increase sun-safety behaviour among male outdoor workers. **Methods:** This parallel-controlled, non-randomized study included outdoor construction and arboricultural workers, recruited from five companies. Twenty-eight workers were assigned to the intervention group, where they received a preventive toolbox, while 26 workers were assigned to the control group. The toolbox included information on UVR health risks and preventive measures, as well as sunscreen provision. The primary outcome was internal UVR exposure, measured by the relative cis-urocanic acid (cUCA) levels in the stratum corneum (SC). SC samples were taken from two skin sites (cheek and neck) at baseline and 6 weeks. Secondary outcomes included sun-protective behaviour, workplace encouragement, knowledge and attitude/motivation, all assessed using questionnaires.

Results: A difference in cUCA was found between groups with lower cUCA at the cheek (-0.065 (95% CI: -0.101 to -0.029)) and neck location (-0.032 (95% CI: -0.068-0.004)) for the intervention group. Reported sunscreen use significantly improved in the intervention compared with control group (difference between group (11.01 (95% CI: 2.04-20.10)). For other secondary outcomes no statistical differences between groups were found. **Conclusion:** The toolbox intervention led to a reduction of internal UVR exposure, consistent with a self-reported increase in sunscreen use, compared to no intervention. Future research should focus on the longer-term preventive effects of this type of toolbox following further development and evaluation.

de Boer et al. 2025.

Frontiers in Public Health, vol. 13.

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Keywords: Arboricultural workers; construction workers; non-melanoma skin cancer; occupational disease; solar radiation; stratum corneum; sunscreen use; ultraviolet exposure.

Evidence Level: 3B

Link: <https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2025.1579180/full>

Differences in risk perception between the construction and agriculture sectors: An exploratory study with a focus on carcinogenic risk

Background: Risk perception is crucial in occupational health and safety, particularly in high-risk sectors like agriculture and construction. This study investigates the influence of personality traits, emotional states, and socio-demographic variables on perceived risks, explicitly focusing on carcinogenic exposure. The aim is to identify key factors shaping risk perception to inform safety interventions. **Methods:** Using a correlational research design, 91 Italian workers (49 from construction and 42 from agriculture) completed a comprehensive questionnaire assessing personality (Big Five model), emotional state, self-perceived safety knowledge, and risk perception across 14 dimensions. Statistical analyses included correlations, ANOVA, and regression models to explore relationships between variables. **Results:** Open-mindedness, emotional stability and extraversion were inversely related to perceived risk levels, while conscientiousness and friendliness correlated positively. Workers in agriculture reported higher awareness of carcinogenic risks than construction workers, though no significant differences emerged in perceived risk levels. Negative emotional states predicted higher risk perception, while self-perceived safety knowledge had only minor correlations with specific risk dimensions. Gender, age, and service length did not significantly influence risk perception. **Conclusion:** Personality traits, particularly openness and emotional stability, strongly influence risk perception, highlighting the importance of considering individual psychological profiles in occupational safety interventions. Although emotional state plays a notable role, self-perceived safety knowledge showed limited impact, suggesting a need for targeted education.

Barattucci et al. 2025.

La Medicina del Lavoro, vol. 116, no. 3.

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Keywords: Risk perception; construction; agriculture; carcinogenic risk.

Evidence Level: 5B

Link: <https://mattioli1885journals.com/index.php/lamedicinadellavoro/article/view/16796>

Chronic Health Issues

Short-term sick leave due to epilepsy in the Swedish Prospective Regional Epilepsy Database and Biobank for Individualized Clinical Treatment (PREDICT)

Objective: Epilepsy is associated with low socioeconomic standing and increases the risk of sick leave. Longer periods resulting in benefit payments are captured by administrative data, but the disease also entails a risk of repeated short sick leave periods, which have so far not been studied or quantified. The aim of this study was to describe the frequency of short sick leave in persons with epilepsy (PWE) and the characteristics of these PWE. **Methods:** A prospective multicentre study, Prospective Regional Epilepsy Database and Biobank for Individualized Clinical Treatment (PREDICT) project, based on medical records and yearly self-report questionnaires in 2020-2023. PWE from five neurology departments who were working, studying, or applying for work were included, and they reported the number of sick leave days the past year in the questionnaires. Socioeconomic data was retrieved from Statistics Sweden. Demographic and clinical factors were compared by chi-squared test, Fisher's exact test, or Mann-Whitney U-test.

Results: Of the 288 included PWE, 76.4% (n = 220) stated not having stayed at home due to their epilepsy, 13.9% (n = 40) replied 1-5 days, 1.4% (n = 4) 6-10 days, and 8.3% (n = 27) >10 days. More recently diagnosed PWE reported more sick leave days. Short-term sick leave was more prevalent in those with seizures, with medication side effects, and in those with polytherapy. Demographic and socioeconomic factors did not differ between those with or without sick leave days. In the 184 participants who had replied to the questionnaire at the 1 and/or 2 years' follow-up, the distribution did not differ from the baseline report. **Significance:** Most PWE do not have short-term sick leave. Short-term sick leave was mainly seen in those with more difficult-to-treat or newly diagnosed epilepsy. Future studies should address if interventions like information about high-risk periods to patients and employers can improve psychosocial outcomes. **Plain language summary:** Epilepsy can impact work ability, potentially leading to longer sick leaves or disability pensions, but shorter absences are less studied and are not included in the

national registries in Sweden. This study explores shorter work absences in epilepsy patients attending neurology clinics in western Sweden. A quarter of patients reported missed workdays, but 68% had no sick leave recorded in national registries. Those with poorly controlled or newly diagnosed epilepsy were more likely to take sick leave, offering insights for patients, healthcare providers, and employers about managing epilepsy in the workplace.

Andrén et al. 2025.

Epilepsia Open, vol. 10, no. 3.

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Keywords: Sick leave; epilepsy; workplace; work ability.

Evidence Level: 4B

Link: <https://onlinelibrary.wiley.com/doi/10.1002/epi4.70029>

Compensation for patients with work-related lung cancers: Value of specialised occupational disease consultations to reduce under-recognition

Purpose: The aim of this retrospective study was to analyse the compensation procedures concerning patients presenting with work-related lung cancer (LC), hospitalised in a French university hospital, and to assess the benefit of systematic specialised occupational disease (OD) consultations in improving procedures for reporting and recognising OD. **Methods:** Patient exposure to occupational lung carcinogens was assessed via an analysis of a standardised questionnaire, completed between 1 January 2009 and 24 April 2023. Among the 2024 patients who completed the questionnaire, 621 patients with probable exposure to occupational lung carcinogens were included. Among these patients, two groups were compiled: group 1, consisting of the 392 subjects who did not benefit from specialised OD consultations, and group 2, consisting of the 229 subjects who benefited from such consultations since 2014 and to whom a medical certificate to claim for compensation was issued by a physician. During the second phase of our study, we determined the outcome of the compensation procedure for OD. Uni- and multivariate logistic regressions were performed according to descending logistic regression methods. **Results:** Multivariate analyses, including smoking status, sex, age and claim for compensation, confirm the significant relationship between specialised OD consultation and claim for compensation (OR 18.13, 95% CI [11.47-28.64]). Furthermore, the rate of occupational disease recognition has multiplied by 1.5 since 2014.

Conclusion: This study confirms the importance of specialised OD consultations in helping patients with LC to obtain compensation and to reduce under-recognition.

Roux et al. 2025.

International Journal of Environmental Research and Public Health, vol. 22, no. 6.

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Keywords: Cancer; compensation; lung; occupational disease; occupational exposure; recognition; work-related cancer.

Evidence Level: 4B

Link: <https://www.mdpi.com/1660-4601/22/6/927>

Perspectives on obesity management and the use of anti-obesity medicine from US employees and employers: Results from the OBSERVE Study

Personal health factors and direct and indirect costs of obesity affect employers and employees. This research aimed to understand perceptions of obesity management and anti-obesity medications (AOMs) among employers and employees. In 2022, people with obesity and employers completed cross-sectional surveys about perceptions of obesity and its management, including AOMs. Data were analysed with descriptive statistics. Data from 461 employed people with obesity (EwO) and 51 employer representatives (ER) were analysed. Both EwO and ER acknowledged the impact of obesity on future health problems (88.3%; 100.0%) and perceived obesity as a disease (60.5%; 80.4%) to varied degrees. Both groups perceived an incremental value in combining self-directed lifestyle changes and AOMs (57.5%; 66.7%) and perceived healthcare provider-guided lifestyle change alongside AOMs as the most effective approach for maintaining long-term weight reduction (56.4%; 66.6%). More than two-thirds (68.6%) of ER expressed willingness to revisit their AOM coverage decisions, though cost of medication coverage (72.5%) and

affordability of medications for employees (68.7%) were identified as barriers. ER believed that data showing reductions in premiums and claims at their organizations (78.4%) would be helpful in supporting the coverage of AOMs. While EwO and ER were receptive toward AOMs, organization-level barriers existed with AOM coverage. Evidence demonstrating the benefits of evidence-based obesity care, direct/indirect cost reductions, and the impact of obesity may address barriers to AOM coverage and improve obesity care and outcomes of their workforces.

Ard et al. 2025.

Population Health Management, vol. 28, no. 3.

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Keywords: Anti-obesity medications; barriers; employers; obesity; overweight.

Evidence Level: 4B

Link: <https://pubmed.ncbi.nlm.nih.gov/40170585/>

Implementing vocational rehabilitation for people with multiple sclerosis in the UK National Health Service: A mixed-methods feasibility study

Purpose: To implement a job retention vocational rehabilitation (VR) intervention (MSVR) for people with multiple sclerosis (MS) and their employers in the UK National Health Service (NHS). **Methods:** Multicentre, single-arm feasibility study with post-intervention interviews. MSVR was delivered by an occupational therapist (OT). Feasibility was assessed by recruitment rates, compliance, and practicality of delivery. Acceptability was assessed with post-intervention interviews. A survey assessed change in eight vocational outcomes (e.g., vocational goals, work instability) immediately post-intervention and at 3-month follow-up. **Results:** Recruitment and training an OT was challenging. Twenty participants with MS, three employers, and three healthcare professionals were recruited. All participants but one completed the intervention. Factors affecting intervention adherence included annual leave and family responsibilities. MSVR was associated with improved vocational goal attainment post-intervention ($t(18) = 7.41, p = <0.001$) and at follow-up ($t(17) = 6.01, p = <0.001$). There was no change to the remaining outcomes. Interviews identified six themes: intervention impact, accessibility of support, the OT's role, readiness for support, workplace supportiveness, and barriers to NHS delivery. **Conclusion:** Challenges with recruitment, identifying newly diagnosed MS participants, and understanding the OT's training needs to deliver the intervention were identified. The intervention demonstrated acceptability, but participants wanted it to continue for longer to address further needs.

De Dios Perez et al. 2025.

Disability and Rehabilitation, vol. 47, no. 12.

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Keywords: Vocational rehabilitation; job retention; multiple sclerosis; national health service; occupational therapy.

Evidence Level: 5B

Link: <https://pubmed.ncbi.nlm.nih.gov/39434610/>

Work-related experiences and needs while undergoing curative cancer therapy: Exploring the target population's perspective during the developmental phase of a work-oriented intervention

Purpose: Cancer affects a great number of people during working life, and tailored interventions targeting this population are important. The present study, focused on the developmental phase of a work-oriented intervention, aimed to describe work-related experiences and needs among people undergoing curative cancer therapy. **Methods:** People ($n = 22$, age md 55 years, range 39-64, purposive sampling) undergoing adjuvant or neo-adjuvant chemo-/radiotherapy for breast ($n = 12$), prostate ($n = 5$), or colorectal ($n = 5$) cancer were individually interviewed using a semi-structured interview guide covering their ability to work and work-related facilitators, barriers, and needs. Qualitative content analysis with an inductive approach was applied. **Results:** When undergoing curative cancer treatment, striving for work-life balance and a normal life is challenging, but necessary for wellbeing, according to the participants. Five subthemes described their experiences and needs: "Cancer is not my identity, and working helps me experience a sense of self," "I mostly have confidence in my future ability to work," "I need to find a new balance

between work, private life, and my changed health needs," "Having flexible working conditions helps me work, and both strengthens and limits my wellbeing," and "Having access to individual support, in which others and I participate, affects my ability to work." **Conclusion:** While undergoing curative cancer therapy, striving for work-life balance and a normal life is challenging but necessary for wellbeing. Our study findings suggest that a work-oriented intervention tailored to individual needs, flexibility in working conditions, and cooperation between the employee and various stakeholders are warranted during the early stage of cancer therapy.

Eklund et al. 2025.

Supportive Care in Cancer, vol. 33, no. 7.

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Keywords: Cancer rehabilitation; complex intervention; occupational health; oncology; work-life balance; work-oriented intervention.

Evidence Level: 5B

Link: <https://link.springer.com/article/10.1007/s00520-025-09624-1>

Occupational Exposure

Occupational noise in the university setting: Dosimetric assessment and strategies for exposure reduction

Purpose: This study investigates occupational noise exposure in a university setting through dosimetric assessments conducted at Universidad Estatal de Milagro (UNEMI), Ecuador, by analysing measurements collected in distinct campus areas during two periods, 2017 and 2025. **Methods:** Sound pressure levels were measured across selected high-traffic and functional campus areas using standardized equipment in accordance with UNE-EN-ISO 9612:2009. **Results:** Measurements revealed an increasing trend in occupational noise exposure across university areas, with 2025 levels substantially exceeding recommended thresholds. **Conclusions:** The findings emphasize the critical need for implementing targeted noise mitigation strategies to protect auditory health and preserve academic excellence within higher education institutions. **Implications:** Adopting these strategies can significantly reduce occupational health risks and foster a healthier, more effective academic environment. The study proposes comprehensive mitigation strategies tailored to university environments to address these challenges.

Torres-Cobo et al. 2025.

Frontiers in Public Health, vol. 13.

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Keywords: Acoustic dosimetry; noise exposure; noise mitigation; occupational noise; university auditory health.

Evidence Level: 3B

Link: <https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2025.1581677/full>

Workplace risk assessment criteria for pregnant workers exposed to physical exertion and biological and chemical hazards

Workplace risk assessment criteria for pregnant workers in the EU remain inconsistent and poorly harmonised, with notable gaps in practical guidelines for occupational health physicians (OHPs). This regulatory ambiguity could lead to either insufficient protection or unnecessary exclusion of pregnant workers from the workplace, with significant implications for maternal and foetal health, as well as healthcare and social security systems. The aim of this study was to propose common, harmonised criteria for workplace risk assessment in healthy pregnant workers exposed to physical exertion and biological and chemical hazards. The criteria were developed through structured expert consultation involving occupational and sports medicine specialists from the Croatian Society of Occupational Health. To that end, we compiled and presented relevant legal and scientific literature, which served as the basis for discussion. Expert opinion was obtained via an anonymous online questionnaire administered during a structured expert workshop. The proposed criteria are based on the CLP Regulation (EC No. 1272/2008) classification of reprotoxic substances, identification of key biological hazards (e.g., cytomegalovirus, parvovirus B19,

rubella virus, varicella-zoster virus, and *Toxoplasma gondii*), and assessment of physical workload using the Key Indicator Methods (KIM) developed by the German Federal Institute for Occupational Safety and Health (BAuA). By integrating legal context, medical evidence, and expert judgment, the proposed criteria aim to support consistent, timely, and evidence-based risk assessment and to facilitate national and EU guideline development for the protection of pregnant workers.

Samardžić et al. 2025.

Archives of Industrial Hygiene and Toxicology, vol. 76, no. 2.

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Keywords: Key Indicator Method; biological agents, CLP Regulation; expert opinion; foetal health; maternal health; physical workload; reprotoxic substances.

Evidence Level: 4B

Link: <https://sciendo.com/article/10.2478/aiht-2025-76-3996>

Effects of occupational dust exposure on the health status of workers in China

This cross-sectional study examined the health impacts of occupational dust exposure on workers in Fujian Province, China, using data collected from 2020 to 2021. The primary objective was to assess the associations between occupational dust exposure and several adverse health outcomes, including abnormal chest X-ray (Abn-CXR), abnormal pulmonary function tests (Abn-PFTs), pneumoconiosis (PC), abnormal electrocardiograms (Abn-ECGs), abnormal liver function tests (Abn-LFTs), hypertension (HTN), and hearing loss (HL). logistic regression models were employed to identify significant risk factors. Stratified analyses by age and gender were performed to evaluate demographic differences in health risks. The results showed that workers currently employed, those with over 10 years of dust exposure, and workers exposed to silica, cement, or coal dust had a higher risk of Abn-CXR, Abn-PFTs, PC, Abn-ECGs, Abn-LFTs, HTN, and HL. Stratified analyses further revealed that male workers and individuals over 40 years old experienced a higher risk of abnormal health outcomes. These findings underscore the urgent need for targeted interventions, improved protective measures, and stricter occupational safety regulations to reduce the health burden associated with dust exposure in the workplace.

Li et al. 2025.

Scientific Reports, vol. 15, no. 1.

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Keywords: Dust exposure; occupational disease; occupational health; physical examination; public health.

Evidence Level: 4B

Link: <https://www.nature.com/articles/s41598-025-04014-3>

Heat exposure, heat strain, and off-work recovery of Guatemalan sugarcane workers

Agricultural workers are at high risk for heat-related illnesses when performing heavy labour in hot conditions. Occupational heat strain, the physiological response to heat stress, is hypothesized to be common in this worker population but has rarely been measured objectively through core body temperature (T_c). The objective of this study was twofold: 1) evaluate workday heat strain and 2) examine the trajectory of heat exposure and T_c from the workday through the off-work hours to advance understanding of the recovery process and conditions of heat-exposed agricultural workers. Among 55 male Guatemalan agricultural workers, individual heat exposure (using ambient temperature loggers) and T_c (via an ingestible pill) were measured across a 24-h period, including workday and off-work hours. Urine samples were collected to assess hydration status on and off-work. Workers reported off-work activities, hydration practices, sleep, and nutrition through a survey. Data were summarized using descriptive statistics and visualizations. Workers experienced excessive heat strain (44% with $T_c > 38.0^\circ\text{C}$, 16% with $T_c > 38.3^\circ\text{C}$, and 6% with $T_c > 38.5^\circ\text{C}$) during the workday. Approximately 29% achieved a higher maximal T_c during off-work hours than during the workday. Nearly 15% of workers reported sleeping < 7 h. There is a need to understand off-work conditions, practices, and resources available to workers to mitigate heat strain and related illnesses. Heat stress and T_c monitoring should extend to post work shift for assessment of workers' physiological recovery and to inform more comprehensive interventions to protect worker health. This study examined the trajectory of heat exposure and core body temperature (T_c) across the workday into off-work hours among agricultural workers at risk of heat-related illness. Workday heat strain

was common, and a significant proportion of workers experienced higher off-work T_c compared with their workday T_c . Survey and environmental data collected from workers provide insights into the off-work practices and conditions of the home environment that could influence the recovery of workers.

Krisher et al. 2025.

American Journal of Physiology-Regulatory, Integrative and Comparative Physiology, vol. 328, no. 6.

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Keywords: Agricultural workers; heat stress; home environment; recovery.

Evidence Level: 5B

Link: <https://journals.physiology.org/doi/full/10.1152/ajpregu.00004.2025>

Sedentary Practices

The effect of computer prompt in breaks of sedentary behaviour among office workers: A systematic review and meta-analysis

Background: Prolonged sitting time in the workplace constitutes a significant portion of waking hours. Sedentary behaviour is associated with higher risks of cardiovascular diseases, obesity, and all-cause mortality. Interventions to reduce workplace sitting, such as health apps, height-adjustable desks, and active breaks, have shown relative effectiveness in improving health outcomes. Among these, computer prompt interventions represent a simple and scalable strategy that can remind workers to take breaks and reduce sedentary behaviour. This study evaluates the effectiveness of computer prompt interventions to reduce sitting at work compared to no intervention or combined strategies. **Methods:** Primary studies were searched in PubMed (MEDLINE), EMBASE, Scopus, and CENTRAL of the Cochrane Library. The search was conducted until December 2024. Keywords included terms like "sedentary behaviour," "computer prompts," "sitting time," and "office workers." Only randomized controlled trials (individual or cluster) involving desk-based workers aged 18 or older that evaluated computer prompt software were included. Risk of bias was assessed using the Cochrane Risk-of-Bias tool (RoB2). Mean differences with 95% confidence intervals (CI) were calculated for sitting time and secondary outcomes. Analyses were performed using RevMan and R software, and GRADE methodology was applied to assess the certainty of evidence. **Results:** From 17,880 records, 18 studies involving 1164 office workers were included in the analysis. Ten studies focused exclusively on computer prompts, while 8 studies implemented combined strategies (e.g., computer prompts plus sit-to-stand desks). The median intervention length was 8 weeks, ranging from one to 24 weeks. Studies using only computer prompts included breaks lasting from 1 to 10 min every 30 min up to an hour. Combined strategies included breaks from 6 to 30 min every 30 min up to 3 h. According to objective measurements, the meta-analysis showed a significant reduction of 12.46 min/workday in sitting time (95% CI: -18.12, -6.80) and a significant increase of 1029.99 steps/workday (95% CI: 815.97, 1244). Secondary outcomes included work-related, musculoskeletal, and cardiometabolic outcomes favouring computer prompts but not statistically significant. The certainty of evidence for primary outcomes is rated low to moderate according to GRADE. **Conclusions:** Computer prompt software interventions show effectiveness in reducing sitting time among office workers. However, more long-term prospective studies with larger sample sizes are needed to accurately determine the effectiveness of computer prompts on various work- and health-related outcomes. **Trial registration:** The review protocol was registered in the Prospero database (CRD42021287870).

Leppe-Zamora et al. 2025.

International Journal of Behavioral Nutrition and Physical Activity, vol. 22, no. 1.

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Keywords: Computer prompt; office work; sedentary behaviour; sitting position; sitting time; workplace.

Evidence Level: 1A

Link: <https://ijbnpa.biomedcentral.com/articles/10.1186/s12966-025-01781-0>

Physical Activity

Occupational and leisure-time physical activity and prospective musculoskeletal pain-relief prescribed medication among blue-collar workers: 24-h device-measured physical activity and Danish registers

Musculoskeletal pain is the biggest contributor to burden of disease, causing excessive use of pain-relief medication. Non-pharmaceutical measures are called on for handling this burden. Guidelines recommend physical activity as an effective non-pharmaceutical measure. However, it is unknown if occupational physical activity has the same preventive effects on redeeming pain-relief medication as when performed during leisure-time ("The Physical Activity Paradox"). We aimed to investigate if the paradox contributes to the redemption of prescribed pain relief-medication. 24-h device-measured physical activity data [sitting, standing, light physical activity, moderate-to-vigorous physical activity (MVPA) and time in bed]) were collected from 824 workers using a thigh-worn accelerometer during work and leisure-time. Redeemed pain-relief prescribed medication was retrieved from the Danish National Prescription Registry during a 4-year follow-up. The prospective association between occupational and leisure-time physical activity and number of redeemed pain-relief prescribed medication was analysed using a generalized linear model, adjusted for potential confounders. During follow-up, 53% of the workers redeemed a pain-relief medication. In leisure-time, 30 min more of MVPA per day were associated with 23% lower risk (RR = 0.77; 95% CI 0.64 - 0.94) of redeeming pain-relief medication. In contrast, occupational physical activity was not associated with the risk of redeeming pain-relief medication [RR = 1.04 (95% CI 0.89 - 1.20)]. Leisure-time MVPA was associated with lower risk of redeeming pain-relief medication, while no beneficial association was found for occupational MVPA. These findings support the paradox that the domain of physical activity is important for redeeming pain-relief medication. PERSPECTIVE: Leisure-time MVPA differs from occupational MVPA in its association with redeeming pain-relief medication. Increasing leisure-time MVPA may serve as an effective non-pharmacological strategy to reduce pain-relief medication redemption. These findings could potentially inform guidelines for managing musculoskeletal pain, highlighting the need to differentiate between occupational and leisure-time physical activity.

Kyriakidis et al. 2025.

The Journal of Pain, vol. 31. .

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Keywords: Accelerometer; leisure-time physical activity; occupational physical activity; pain-relief; register-based.

Evidence Level: 3B

Link: [https://www.jpain.org/article/S1526-5900\(25\)00614-5/fulltext](https://www.jpain.org/article/S1526-5900(25)00614-5/fulltext)

Musculoskeletal Health

Joint association of occupational and leisure-time physical activity with low back pain in Korean adults

Objective: This study aimed to examine the effect of the interaction between gender-specific occupational physical activity (OPA) and leisure-time physical activity (LTPA) on low back pain (LBP) risk. **Methods:** Data were obtained from a large-scale cohort survey of Koreans, comprising a total of 2750 participants recruited during 2011-2012. OPA and LTPA were assessed using validated questionnaires and classified into two groups: "< 150 min/wk" and "≥ 150 min/wk." LBP was defined based on the Oswestry Disability Index (ODI) and visual analogue scale (VAS) criteria. Multiple logistic regression analyses were performed to calculate odds ratios (OR) with 95% confidence intervals (CI), and multiple linear regression analyses were used to estimate β coefficients with 95% CI to assess the associations between OPA, LTPA, and LBP.

Results: The results showed that increased OPA was significantly associated with higher ODI scores ($\beta = 0.02$, $p = 0.021$), whereas increased LTPA was significantly associated with reductions in both ODI ($\beta = -0.07$, $p = 0.012$) and VAS scores ($\beta = -0.01$, $p = 0.013$). Furthermore, engaging in OPA for ≥ 150 min/week was associated with an elevated LBP risk (OR = 1.38, 95% CI = 1.12-1.69), with significant gender differences observed. In contrast, for participants with < 150 min/wk of leisure-related physical activity, LBP risk increased (OR = 1.22, 95% CI = 1.01-1.76), whereas for those with ≥ 150 min/wk, LBP risk decreased (OR = 0.84, 95% CI = 0.66-0.95), a significant effect observed only in females. **Conclusion:** These findings suggest

that ensuring adequate rest during OPA and promoting leisure-related physical activity may be critical strategies for reducing chronic LBP.

Yim et al. 2025.

Musculoskeletal Care, vol. 23, no. 2.

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Keywords: Aged; cohort studies; epidemiology; low back pain; physical activity.

Evidence Level: 4B

Link: <https://onlinelibrary.wiley.com/doi/10.1002/msc.70096>

Evaluating the impact on pain perceptions, pain intensity, and physical activity of a mobile app to empower employees with musculoskeletal pain: Mixed methods pilot study

Background: Mobile apps present opportunities to empower employees with musculoskeletal pain and reduce long-term absenteeism. However, adoption remains limited because of a lack of empirical evidence and challenges in user-friendly design. **Objective:** This pilot study aimed to evaluate the potential effects of a fully automated, app-based pain management intervention tailored for employees. Specifically, the study aimed to (1) assess the effect of the intervention on maladaptive pain perceptions, pain intensity, and physical activity and (2) identify factors influencing its effectiveness. **Methods:** A total of 66 employees from a Belgian university hospital who had been experiencing musculoskeletal pain for at least 6 weeks participated in a 24-week intervention. The app-based intervention focused on reducing maladaptive pain perceptions, providing work-related guidance, and promoting healthy activity habits through interactive modules, real-time recommendations, and goal-setting features. Every 6 weeks, participants completed a questionnaire measuring maladaptive pain perceptions (pain catastrophizing and fear-avoidance beliefs). Pain intensity was recorded daily using a visual analogue scale, and step count was tracked daily using an activity tracker. In addition, semi structured interviews were conducted with 12 participants to explore how they engaged with the intervention and perceived its impact. **Results:** Quantitative analysis showed a significant reduction in pain catastrophizing ($B=-0.83$, $P<.001$, $d=-0.27$), with greater decreases observed among participants with higher baseline scores ($\sigma=-0.38$; $P=.09$). No significant overall change was found in fear-avoidance beliefs ($B=-0.35$; $P=.15$), although individual trajectories varied ($\sigma^2=1.34$; $P=.04$). Pain intensity also showed significant variability across participants ($\sigma^2=17.29$; $P=.03$) despite no overall effect ($B=-0.37$; $P=.67$). No significant change was observed in the daily step count ($B=107.50$; $P=.23$). Qualitative analysis revealed that the effectiveness of the intervention was hindered by content and design choices that did not adequately account for diverse work settings and the busy lives of employees. Cognitive biases and non supportive work environments further complicated the successful implementation of the intervention in the workplace. **Conclusions:** This pilot study demonstrates the potential of an app-based intervention to support employees with musculoskeletal pain by reducing pain-related fear and promoting active coping strategies. While promising for some, digital interventions alone may be insufficient for employees with more complex needs. Blended approaches and integration within supportive workplace environments are likely essential to enhance effectiveness and promote sustainable work participation.

Keyaerts et al. 2025.

JMIR Formative Research, vol. 9.

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Keywords: Digital health; human-centered design; mHealth; mixed methods; mobile health; musculoskeletal disorders; occupational health; pain management; pain perceptions.

Evidence Level: 5B

Link: <https://formative.jmir.org/2025/1/e67886>

Guiding and Supporting Mental Health and Wellbeing

Mental Health

Effects of online mindfulness-based stress reduction training on depression and anxiety symptoms among psychiatric healthcare workers in a randomized controlled trial: The mediating role of emotional suppression

Background: Psychiatric healthcare workers experience prolonged exposure to psychological trauma and negative emotions, which ultimately predisposes them to mental health issues. The effectiveness of online mindfulness-based stress reduction training on depression and anxiety symptoms among psychiatric healthcare workers (HCWs) and the possible mechanisms that benefit these outcomes remain unclear.

Methods: This randomized controlled trial evaluated the effect of an 8-week online MBSR among psychiatric HCWs (165 participants) at the mental health centre in Shenyang, China from August to November 2022, compared with the waitlist control group. The effective sample size that actually completed the intervention was 135 (74 participants in the intervention group and 61 in the control group), and the loss-to-follow-up rate was approximately 18%. Participants completed assessments of depression and anxiety symptoms (Hospital Anxiety and Depression Scale, HADS), and emotional suppression (Courtauld Emotional Control Scale, CECS) at baseline and week 8 online via the "Wenjuanxing" Platform. Intervention outcomes were estimated via analysis of covariance (ANCOVA). Multiple linear regression and mediation models with bias-corrected bootstrapping were performed to explore the mediating role of emotional suppression. **Results:** Compared with those in the control group, the participants in the online MBSR group presented lower emotional suppression ($P < 0.001$), symptoms of depression ($P < 0.001$) and anxiety ($P = 0.002$). The decrease in emotional suppression mediated the effects of online MBSR on 8-week symptoms of depression (indirect effect = - 1.106, 95% CI [- 1.683, - 0.600]) and anxiety (indirect effect = - 1.182, 95% CI [- 1.731, - 0.706]). **Conclusions:** Online MBSR training could be utilized to alleviate depression and anxiety symptoms in psychiatric HCWs. It might weaken depression and anxiety symptoms by reducing emotional suppression. Emotional suppression might be the key change process of the effects of online MBSR on depression and anxiety symptoms in psychiatric HCWs. **Trial registration:** The clinical trial registration code was obtained from the Chinese Clinical Trial Registry (date of registration: 02/08/2022, registration number: ChiCTR2200062347).

Wu et al. 2025.

BMC Psychiatry, vol. 25, no. 1.

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Keywords: Depression and anxiety symptoms; emotional suppression; mediator; online mindfulness-based training; psychiatric healthcare workers.

Evidence Level: 2B

Link: <https://bmcpsy psychiatry.biomedcentral.com/articles/10.1186/s12888-025-06967-1>

US workers' self-reported mental health outcomes by industry and occupation

Importance: Work-related hazards and stress have been shown to be associated with mental health, with suicide rates among adult workers increasing since 2000. **Objective:** To determine if self-reported lifetime diagnosed depression, frequent mental distress (FMD), extreme distress prevalences, and mean mentally unhealthy days (MUD) varied among current workers by industry or occupation. **Design, setting, and participants:** This cross-sectional study used Behavioural Risk Factor Surveillance System (BRFSS) data from 37 states reporting workers' industry and occupation in 1 or more years between 2015 and 2019. The target population was currently employed civilian adults aged 18 years or older. Analyses were conducted in 2022 and 2023. **Exposures:** Workers' current industry and occupation were the primary exposures of interest. Self-reported sociodemographic covariates included sex, age, race and ethnicity, education, coupled status, and health care coverage. **Main outcomes and measures:** Self-reported lifetime diagnosed depression, FMD, extreme distress, and MUD. **Results:** Of a total 536 279 workers assessed (unweighted sample, 535 997 workers; 263 007 female [49.1%]; 48 279 Hispanic [9.0%], 40 188 non-Hispanic Black [7.5%], 400 604 non-Hispanic White [74.7%]), 469 129 reported their industry or occupation. Lifetime diagnosed depression was reported by 80 319 of 534 342 workers (14.2% [95% CI, 13.9%-14.4%]). Mean

MUD was 9.5 days (95% CI, 9.4-9.7 days) among 530 309 workers, and in all sociodemographic groups the mean MUD was 3 to 5 times higher among workers who reported lifetime diagnosed depression. Higher prevalences than all workers for lifetime diagnosed depression, FMD, and extreme distress were reported by workers who were female (lifetime diagnosed depression, 19.5% [95% CI, 19.1%-19.9%]; FMD, 11.6% [95% CI, 11.3%-11.9%]; extreme distress, 4.8% [95% CI, 4.6%-5.1%]), ages 18 to 34 years (lifetime diagnosed depression, 16.9% [95% CI, 16.4%-17.3%]; FMD, 13.6% [95% CI, 13.1%-14.0%]; extreme distress, 5.5% [95% CI, 5.2%-5.8%]), and no longer or never in a couple (lifetime diagnosed depression, 18.0% [95% CI, 17.6%-18.4%]; FMD, 13.3% [95% CI, 12.9%-13.7%]; extreme distress, 5.7% [95% CI, 5.4%-6.0%]). By industry, retail trade (lifetime diagnosed depression: APR, 1.15 [95% CI, 1.05-1.25]; FMD: APR, 1.23 [95% CI, 1.10-1.39]) and accommodation and food services (lifetime diagnosed depression: APR, 1.13 [95% CI, 1.03-1.25]; FMD: APR, 6.8 [95% CI, 6.0-7.7]) had higher adjusted prevalences of lifetime diagnosed depression and FMD. By occupation, arts, design, entertainment, sports, and media (1.32 [95% CI, 1.09-1.60]); health care support (1.19 [95% CI, 1.03-1.38]); food preparation and serving (1.20 [95% CI, 1.05-1.36]); and sales and related occupations (1.13 [95% CI, 1.01-1.27]) had higher adjusted prevalences of FMD than the comparison group. Health care support (6.6% [95% CI, 5.5%-7.8%]), food preparation and service (6.9% [95% CI, 5.9%-7.8%]), building and grounds cleaning and maintenance (5.2% [95% CI, 4.4%-6.0%]), personal care and service (5.8% [95% CI, 4.9%-6.8%]), and sales and related occupations (4.8% [95% CI, 4.3%-5.3%]) had higher unadjusted extreme distress than all workers. **Conclusions and relevance:** In this cross-sectional study, poor mental health among workers varied significantly by sociodemographic categories; significant differences among industry and occupation groups remained after adjustment. More research is needed on the effects of work-related factors on mental health, which may inform tailored treatment and prevention strategies.

Sussell et al. 2025.

JAMA Network, vol. 8, no. 6.

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Keywords: Mental health; workers; US.

Evidence Level: 4B

Link: https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2835060#google_vignette

Trajectories of work disability and unemployment before and after a common mental disorder diagnosis among young private sector employees in Sweden: A register-based longitudinal study

Purpose: To identify trajectory groups of work disability (WD), including sick leave and disability pension, and unemployment three years before and six years (from Y-3 to Y + 6) after a common mental disorder (CMD) diagnosis and to investigate associations of socio-demographic, work-related and clinical factors with trajectory membership. **Methods:** A longitudinal nationwide register-based study was conducted including individuals aged 22-29 years, gainfully employed in the private sector, with a CMD diagnosis in specialised healthcare or prescribed antidepressant (N = 12,121) in 2014 (Year 0/Y0), with follow-up from Y-3 to Y + 6. Group-based trajectory analyses identified groups of individuals who followed similar trajectories of months of WD and unemployment, respectively. Multinomial logistic regression determined associations between socio-demographic, work-related and clinical factors and trajectory membership. **Results:** In the CMD group, we identified three trajectory groups, each for WD and unemployment. Only 7% individuals belonged to a 'Fluctuant high' trajectory group with four months of WD in Y0, which peaked at 7 months in Y + 3 and reduced to 5 months in Y + 6. For unemployment, 15% belonged to an 'Increasing medium' trajectory group that steadily increased from 1.3 months in Y0 to 2.6 months in Y + 6. Sex, educational level and musculoskeletal disorders for WD, and educational level, living area and occupational class for unemployment, influentially determined the variance across the CMD trajectory groups.

Conclusions: Specific vulnerable groups regarding unfavourable WD (women, low education and musculoskeletal disorders) and unemployment (manual work, low education and rural residence) trajectories require special attention regarding their return-to-work process following a CMD diagnosis.

Amin et al. 2025.

Social Psychiatry and Psychiatric Epidemiology, vol. 60, no. 6.

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Keywords: Cohort; disability pension; sick leave; trajectory.

Evidence Level: 4B

Link: <https://link.springer.com/article/10.1007/s00127-024-02777-0>

Casting a wider net: On the utilitarian nature of burnout assessment in the workplace

Some consider the burnout label to be controversial, even calling for the abandonment of the term in its entirety. In this communication, we argue for the pragmatic utility of the burnout paradigm from a utilitarian perspective, which advocates the greatest good for the most significant number of employees in organisations. We first distinguish between mild work-related burnout complaints and more severe burnout that can be identified in some contexts. We address the classification of burnout as an 'occupational phenomenon' by the World Health Organization and its ambiguous status in the ICD-11, highlighting the challenge of universally diagnosing burnout as a condition. We argue that a purely clinical approach might be too reactive as it normally only identifies employees with a diagnosable condition. We posit that early detection of burnout through valid assessment can identify struggling employees who do not yet have a diagnosable condition. This proactive approach can help prevent escalation into mental health crises and is more sensible for organisations in terms of effectiveness and employee retention.

De Beer et al. 2025.

Evaluations & Health Professionals, vol. 48, no. 2.

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Keywords: Burned out; burnout; depression; utilitarian; work stress.

Evidence Level: 6A

Link: <https://journals.sagepub.com/doi/full/10.1177/01632787241259032>

Psychosocial Issues

Interventions promoting occupational balance in adults: A systematic literature review

Introduction: Occupational balance, the subjective perception of satisfaction and balance in engaging in meaningful activities, is fundamental to individuals' health and well-being. The detrimental impacts of decreased occupational balance are increasingly acknowledged, and interventions are emerging. A comprehensive review of these interventions, targeting occupational balance in adult populations, is needed to ensure effective implementation into both clinical and public health settings. **Objective:** This study aimed to systematically review and synthesize existing interventions that address occupational balance among adults in diverse contexts, and to evaluate their effectiveness. **Method:** A systematic literature search was conducted in PubMed, CINAHL, the Cochrane Library, and EMBASE in April 2024, following the PRISMA guidelines. Peer-reviewed articles published between 2000 and 2024, reporting quantitatively on interventions addressing occupational balance, were included. The NHLBI quality assessment tools were employed to evaluate the risk of bias. A narrative synthesis was performed.

Results: Of the 347 records identified, 18 publications were included in this review. Study designs comprised randomized controlled trials, observational studies, and pre-post studies. Most participants had specific diagnoses, with a predominance of mental health conditions. The review identified 12 interventions aimed at promoting occupational balance, providing an overview of interventions' target groups, goals, features, and content. Overall effectiveness of identified interventions varied across studies, with six demonstrating statistically significant improvements in occupational balance scores. Clinically meaningful changes were observed in areas such as drug craving, social isolation, and work ability.

Conclusion: This review identified promising interventions for promoting occupational balance and enhancing health, well-being, and life satisfaction across various settings. Further research should employ controlled experimental designs to evaluate interventions addressing occupational balance across diverse populations, addressing gender and age differences while assessing effectiveness across delivery modes and settings.

Lentner et al. 2025.

PLoS One, vol. 20, no. 6.

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Keywords: Interventions; occupational balance.

Evidence Level: 1A

Link: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0325061>

Joint contributions of psychological distress and demanding working conditions to short and long sickness absence among young and early midlife municipal employees

This register-linked follow-up study examined whether psychological distress and demanding working conditions are jointly associated with short and long sickness absence (SA) periods among young and midlife Finnish public sector employees. We linked the Helsinki Health Study survey (response rate 51.5%, 80% women, ages 19-39 years in 2017) on psychological distress, physically and mentally strenuous work, and hours per day spent in physical work with the employer's SA register (n = 3609, mean follow-up of 2.1 years). We calculated rate ratios (RRs) and their 95% confidence intervals (CIs) for short (1-7 days) and long (8+ days) SA periods using negative binomial regression models. Additionally, we calculated the synergistic interaction between psychological distress and working conditions. Most (88%) participants had at least one short and 31% at least one long SA period. Participants with psychological distress and exposure to demanding working conditions had the highest RRs for long SA periods (physically strenuous work: RR: 2.27, CI: 1.87-2.77; mentally strenuous work: RR: 2.02, CI: 1.66-2.46; ≥ 3 h per day spent in physical work: RR: 2.41, CI: 1.94-2.99). The interactions for long SA were negative for physically demanding working conditions, but additive for mentally strenuous work. The associations were weaker for short SA periods. Adjusting for other covariates only slightly attenuated these associations. Psychological distress and demanding working conditions were jointly associated with short and long SA periods. Both individual- and workplace-related risk factors for SA need to be considered when planning preventive actions.

Svärd et al. 2025.

European Journal of Public Health, vol. 35, no. 3.

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(<https://creativecommons.org/licenses/by-nc-nd/4.0/>)

Keywords: Psychological distress; working conditions; sickness absence; municipal.

Evidence Level: 4B

Link: <https://academic.oup.com/eurpub/article/35/3/534/8108793?login=false>

Exposure to psychosocial work factors and occupational injury and its severity: Prospective associations among employees in the French national working conditions survey

Background: The few prospective studies on the associations between psychosocial work factors and occupational injury in the general working population provide little information on multiple exposures, injury severity, and gender differences. This study aimed to address these points. **Methods:** The study was based on prospective data from the nationwide Working Conditions survey on a representative sample of the working population in France. A total of 17,486 employees (7302 men, 10,184 women) were followed over one or two 3-year periods from 2013 to 2019. Occupational exposures were measured at the beginning of each period and included 20 psychosocial work factors, 4 working time/hours factors, and 4 physical work factors. Logistic and Hurdle models were used to study their prospective associations with occupational injury and its severity, as assessed by work absence due to injury and its duration.

Results: Most psychosocial work factors predicted occupational injury. Almost all associations persisted in adjusted models, that is, after controlling for covariates and the other occupational factors that were also predictive of occupational injury. No gender differences were found for these prospective associations. For all types of occupational factors, dose-response associations were found between the number of exposures and injury. However, most occupational factors were not predictive of injury severity.

Conclusions: Occupational exposures, and psychosocial work factors in particular, predicted the occurrence of occupational injury more than its severity. Occupational injury prevention programmes should focus on various aspects of the work environment, including psychosocial work factors, and should particularly target multiple exposures.

Bertrais et al. 2025.

American Journal of Industrial Medicine, vol. 68, no. 6.

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Keywords: Multiple exposures; occupational exposures; occupational injury; psychosocial work factors; working conditions.

Evidence Level: 4B

Link: <https://onlinelibrary.wiley.com/doi/10.1002/ajim.23723>

The effect of Effort-Reward imbalance on job performance among primary healthcare professionals: The mediating roles of social support and resilience

In light of the ERI exacerbated by health emergencies, stabilizing the working conditions of primary healthcare professionals and ensuring the consistent operation of the public health system has become a focal point of research. This study was designed to investigate the mechanisms by which ERI affects job performance among primary healthcare professionals in the context of health emergencies, as well as the mediating role of perceived social support and resilience. Participants were recruited from 54 primary healthcare institutions, with a total of 1,050 primary healthcare professionals included in the study. Data were collected using the Effort-Reward Imbalance Scale, Perceived Social Support Scale, Individual Resilience Scale, and Job Performance Scale to assess key variables. Hayes' serial mediation model was applied to examine the interrelationships between these variables. The effects of the Effort-Reward-Imbalance and Job Performance were negatively correlated ($P < 0.01$). ERI influences job performance through three pathways: the mediating role of perceived social support, the mediating role of individual resilience, and the chain mediating role of both perceived social support and individual resilience. Perceived social support and individual resilience moderates the association between Effort-Reward-Imbalance and job performance among primary healthcare professionals.

Fan et al. 2025.

Scientific Reports, vol. 15, no. 1.

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Keywords: Effort-Reward-Imbalance; individual resilience; job performance; perceived social support; primary healthcare professionals.

Evidence Level: 4B

Link: <https://www.nature.com/articles/s41598-025-05533-9>

Early detection of occupational stress: Enhancing workplace safety with machine learning and large language models

Occupational stress is a major concern for employers and organizations as it compromises decision-making and overall safety of workers. Studies indicate that work-stress contributes to severe mental strain, increased accident rates, and in extreme cases, even suicides. This study aims to enhance early detection of occupational stress through machine learning (ML) methods, providing stakeholders with better insights into the underlying causes of stress to improve occupational safety. Utilizing a newly published workplace survey dataset, we developed a novel feature selection pipeline identifying 39 key indicators of work-stress. An ensemble of three ML models achieved a state-of-the-art accuracy of 90.32%, surpassing existing studies. The framework's generalizability was confirmed through a three-step validation technique: holdout-validation, 10-fold cross-validation, and external-validation with synthetic data generation, achieving an accuracy of 89% on unseen data. We also introduced a 1D-CNN to enable hierarchical and temporal learning from the data. Additionally, we created an algorithm to convert tabular data into texts with 100% information retention, facilitating domain analysis with large language models, revealing that occupational stress is more closely related to the biomedical domain than clinical or generalist domains. Ablation studies reinforced our feature selection pipeline, and revealed sociodemographic features as the most important. Explainable AI techniques identified excessive workload and ambiguity (27%), poor communication (17%), and a positive work environment (16%) as key stress factors. Unlike previous studies relying on clinical settings or biomarkers, our approach streamlines stress detection from simple survey questions, offering a real-time, deployable tool for periodic stress assessment in workplaces.

Hasan et al. 2025.

PLoS One, vol. 20, no. 6.

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Keywords: Occupational stress; workplace safety; machine learning; early detection.

Evidence Level: 4B

Link: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0323265>

Cortisol levels and perceived stress in emergency call operators

Introduction: Emergency medical dispatchers are required to provide support to the caller and organize help at the scene, frequently facing demanding situations where assistance decisions must be made promptly. The aim of this study is to assess the level of stress experienced by medical dispatchers and emergency call operators, in relation to their well-being and physical health symptoms. **Materials and methods:** A study was conducted in 2023 involving 23 healthy individuals employed as emergency medical dispatchers and emergency call operators, aged 26 to 65, from the Lublin Voivodeship. Data was collected based on continuous observation conducted over a 12-h day shift, utilizing the JAWS and VAS questionnaires and assessing every 2 h the following: salivary cortisol levels, heart rate, and blood pressure. **Results:** The employee's level of arousal correlated with cortisol levels and significantly decreased during working hours, $B = -13.87$, $SE = 5.16$, $p = 0.009$. Among women, there was an increase in average heart rate during subsequent work hours, $B = 47.4$, $SE = 22.0$, $p = 0.035$. At the end of the workday, longer emergency caller interactions correlated with lower employee heart rates, $B = -0.57$, $SE = 0.28$, $p = 0.046$. Systolic blood pressure significantly increased with a rise in subjective stress assessment, but only during the first 2 h of work, $B = 16.20$, $SE = 5.63$, $p = 0.005$. Diastolic pressure depended on the employee group; among medical dispatchers, diastolic pressure values were higher at the beginning of the shift compared to the end, $B = -40.2$, $SE = 23.9$, $p = 0.098$, while an opposite trend with increased diastolic pressure was observed among 112 call operators. **Conclusion:** The cortisol profile is typical in the group of study participants. Attitude toward work correlates with physiological stress parameters. Longer conversations with an emergency caller during the final hours of work lead to a reduction in employees' heart rates. Women exhibit an increase in heart rate as work progresses. Systolic blood pressure reflects subjective stress assessment during the first 2 h of work. Blood pressure values indicate a higher stress level in the 112 call operators group.

Kulczycka et al. 2025.

Frontiers in Public Health, vol. 13.

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Keywords: Cortisol; emergency call operator; employee; stress; well-being; work environment.

Evidence Level: 5B

Link: <https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2025.1539516/full>

Fostering Work Participation

Return to Work

Return to work for stroke survivors with aphasia: A quantitative scoping review

The international incidence of stroke in people of working age is rising. As such, meaningful work return is a major rehabilitation goal for many individuals, including those with aphasia. This scoping review aimed to outline the post-stroke aphasia evidence related to work outcomes, factors influencing employment along with contemporary vocational-language and communication rehabilitation practice. The review employed terms related to aphasia, stroke, rehabilitation, and return to work in publications preceding 25.6.2023. Data were descriptively analysed, and vocational outcomes were summarized at defined timepoints. Of the 908 articles reviewed, 31 papers were included. Individuals with post-stroke aphasia consistently have lower rates of return to work than those post-stroke without aphasia. Employment at one year was 34.29% for those with aphasia compared to 58.46% for people without aphasia. No literature reported vocational-language assessment practices and there were minimal work-focused aphasia interventions identified. There was insufficient evidence to clearly identify person-related, rehabilitation, workplace or other factors influencing work return. This scoping review has identified that there are gaps in knowledge about the factors that influence work return and targeted vocational rehabilitation for this group. Future research to optimize return to work for individuals with aphasia is recommended.

Burfein et al. 2025.

Neuropsychological Rehabilitation, vol. 35, no. 5.

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Keywords: Aphasia; rehabilitation; return to work; stroke; vocational rehabilitation.

Evidence Level: 1A

Link: <https://www.tandfonline.com/doi/full/10.1080/09602011.2024.2381874>

Elements of return-to-work interventions for workers on long-term sick leave: A systematic literature review

Purpose: The aim of this systematic review is to identify vocational rehabilitation (VR) interventions that are effective to enhance return-to-work (RTW) for people on long-term sick leave (> 90 days) and to identify main elements of these interventions. **Methods:** Six electronic databases were searched for peer-reviewed studies published up to February 2022. Each article was screened independently by two different reviewers. Thereafter, one author performed the data-extraction which was checked by another author. The EPHPP quality assessment tool was used to appraise the methodological quality of the studies.

Results: 11.837 articles were identified. 21 articles were included in the review, which described 25 interventions. Results showed that ten interventions were more effective than usual care on RTW. Two interventions had mixed results. The effective interventions varied widely in content, but were often more extensive than usual care. Common elements of the effective interventions were: coaching, counselling and motivational interviewing, planning return to work, placing the worker in work or teaching practical skills and advising at the workplace. However, these elements were also common in interventions that were not effective on RTW compared to usual care and can therefore not explain why certain interventions are effective and others are not. **Conclusion:** The effective interventions included in this study were often quite extensive and aimed at multiple phases of the RTW-process of the worker. In the future, researchers need to describe the population and the content of the investigated interventions more elaborate to be able to better compare VR interventions and determine what elements make interventions effective.

de Geus et al. 2025.

Journal of Occupational Rehabilitation, vol. 35, no. 2.

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Keywords: Disability pension; intervention; RTW; vocational rehabilitation; work disability.

Evidence Level: 1A

Link: <https://link.springer.com/article/10.1007/s10926-024-10203-0>

Socioeconomic status, antidepressant use, and return to work after disability due to common mental disorders

Background: Common mental disorders (CMDs) are significant causes of work disability. Low socioeconomic status (SES) is a known risk factor for CMDs and work disability, one possible reason being poorer treatment adherence. We aimed to study the realization of pharmacological treatment and antidepressant adherence in patients with CMDs 3 years before and 3 years after being granted a disability pension (DP) and the role of SES in this. We also studied whether antidepressant adherence is associated with return to work (RTW) after a temporary DP. **Methods:** Information on all persons granted a DP due to CMD between 2010 and 2012 in Finland ($n = 12,388$) was retrieved from national registers, which included medical, socioeconomic, and sociodemographic information of the subjects. We used the PRE2DUP method to estimate drug use periods and regression analyses to study associations between SES, taking medications, and RTW. **Results:** Prevalence of taking antidepressants increased towards the DP grant and decreased thereafter, but 14.6% of subjects did not take antidepressants or antipsychotics at all during the study period. Of SES factors, only income was positively associated with antidepressant adherence, lasting over a year. Antidepressant adherence was not associated with RTW. **Conclusions:** An alarming result was the absence of recommended medication in fewer than every seventh patient estimated to be disabled due to pharmacologically treatable psychiatric disorders. Contrary to expectations, SES had only a minor predictive role in antidepressant adherence in this patient group. Contrary to taking antidepressants,

rehabilitation was associated with RTW. The results adduced the importance of CMD treatment optimization regardless of SES.

Leppänen et al. 2025.

European Psychiatry, vol. 68, no. 1.

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Keywords: Antidepressants; common mental disorders; disability pension; return to work; socioeconomic status.

Evidence Level: 4B

Link: <https://www.cambridge.org/core/journals/european-psychiatry/article/socioeconomic-status-antidepressant-use-and-return-to-work-after-disability-due-to-common-mental-disorders/2CC0F35C9E5A2BC112918E69F1F40EFF>

Cooperation in return-to-work interventions for common mental disorders: An ideal theory analysis of actors, goals, and ethical obstacles

The rise in the number of people on sick leave for common mental disorders is a growing concern, both from a societal and individual perspective. One common suggestion to improve the return-to-work process is increased cooperation between the relevant parties, including at least the employer, the social insurance agency and health care. This suggestion is often made on the presumption that all parties share the common goal of reintegrating the patient-employee back into the workplace. In this paper we investigate this presumption by mapping out the ethical frameworks of these three key actors in any return-to-work process. We show that although the goals of these actors often, and to a large extent, overlap there are potential differences and tensions between their respective goals. Further, we emphasise that there may be other limitations to an actor's participation in the process. In particular the health care system is required to respect patient autonomy and confidentiality. There is also an inherent tension in the dual roles of health care professionals as therapists and expert witnesses in work ability assessment. In conclusion, there are potential tensions between the key actors in the return-to-work process. These tensions need to be addressed in order to enable an increased cooperation between actors and to facilitate the development of a feasible plan of action for all parties, including the employee.

Hartvigsson et al. 2025.

Health Care Analysis, vol. 33, no. 2.

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Keywords: Common mental disorders; cooperation; ethical frameworks; institutional ethics; return-to-work; sick leave.

Evidence Level: 6B

Link: <https://link.springer.com/article/10.1007/s10728-024-00491-1>

Presenteeism and Absenteeism

Prognostic factors and models for predicting work absence in adults with musculoskeletal conditions consulting a healthcare practitioner: A systematic review

Purpose: It is difficult to predict which employees, in particular those with musculoskeletal pain, will return to work quickly without additional vocational advice and support, which employees will require this support and what levels of support are most appropriate. Consequently, there is no way of ensuring the right individuals are directed towards the right services to support their occupational health needs. The aim of this review will be to identify prognostic factors for duration of work absence in those already absent and examine the utility of prognostic models for work absence. **Methods:** Eight databases were searched using a combination of subject headings and key words focusing on work absence, musculoskeletal pain and prognosis. Two authors independently assessed the eligibility of studies, extracted data from all eligible studies and assessed risk of bias using the QUIPS or PROBAST tools, an adapted GRADE was used to assess the strength of the evidence. To make sense of the data prognostic variables were grouped according to categories from the Disability Prevention Framework and the SWiM framework was utilised to synthesise findings. **Results:** A total of 23 studies were included in the review, including 13 prognostic models and a

total of 110 individual prognostic factors. Overall, the evidence for all prognostic factors was weak, although there was some evidence that older age and better recovery expectations were protective of future absence and that previous absence was likely to predict future absences. There was weak evidence for any of the prognostic models in determining future sickness absence. **Conclusion:** Analysis was difficult due to the wide range of measures of both prognostic factors and outcome and the differing timescales for follow-up. Future research should ensure that consistent measures are employed and where possible these should be in-line with those suggested by Ravinskaya et al. (2023).

Wynne-Jones et al. 2025.

Journal of Occupational Rehabilitation, vol. 35, no. 2.

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Keywords: Absence; musculoskeletal pain; prognosis; systematic review; work absence.

Evidence Level: 1A

Link: <https://link.springer.com/article/10.1007/s10926-024-10205-y>

Effective interventions to reduce sick leave in workers with mental illnesses: A systematic review of randomized controlled trials

Objective: Effective interventions to reduce sick leave in people with mental illnesses remain unknown. This systematic review of randomized controlled trials (RCTs) assessed the impact of various interventions on reducing sick leave among individuals with mental illnesses. **Methods:** We conducted searches in PubMed, Cochrane Library, and PsycINFO until February 2024 and included RCTs with parallel designs. Two reviewers assessed the quality of trials using the Cochrane risk of bias tool (ROB-2). **Results:** Out of 5109 publications, 75 RCTs were included. Ten RCTs with no serious risk of bias demonstrated that certain interventions could reduce sick leave. Interventions based on cognitive behavioural therapy and problem-solving therapy reduced sick leave within a year, but the effect was not long-lasting. Enhanced care approaches, where physicians and care managers encouraged patients to start and maintain pharmacotherapy or psychotherapy, also decreased absenteeism. Online cognitive behavioural therapy yielded a modest decrease in absenteeism. An intervention involving both employees and supervisors to modify the workplace and address stress reduced long-term sick leave. Involving employees in stressor management initiatives decreased sick leave, and a combination of work-focused and online cognitive behavioural therapy reduced short-term sick leave but did not affect long-term (≥ 15 days) rates. Group therapy led by a clinical psychologist for stress management also showed benefits in the short term (3 months). **Conclusion:** Multifaceted approaches that combine individual therapy and workplace adjustments are more effective in managing sick leave for individuals with mental illnesses than either approach alone.

Shiri et al. 2025.

Journal of Psychosomatic Research, vol. 193.

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Keywords: Absenteeism; anxiety; depression; mental disorders; occupational stress.

Evidence Level: 1A

Link: <https://www.sciencedirect.com/science/article/pii/S0022399925001047?via%3Dihub>

Effects of inpatient occupational rehabilitation vs. outpatient acceptance and commitment therapy on sick leave and cost of lost production: 7-year follow-up of a randomized controlled trial

Objectives: Previously, we reported that an inpatient multimodal occupational rehabilitation program (I-MORE) was more effective than outpatient Acceptance and Commitment Therapy (O-ACT) in reducing sickness absence and was cost-effective over a 24-month period. Here we present 7-years of follow-up on sick leave and the cost of lost production. **Methods:** We randomized individuals aged 18-60, sick-listed due to musculoskeletal or mental health disorders to I-MORE ($n = 82$) or O-ACT ($n = 79$). I-MORE, lasting 3.5 weeks, integrated ACT, physical training, and work-related problem-solving. In contrast, O-ACT mainly offered six weekly 2.5 h group sessions of ACT. We measured outcomes using registry data for days on medical benefits and calculated costs of lost production. Our analysis included regression analyses to examine differences in sickness absence days, logistic general estimating equations for repeated events, and generalized linear models to assess differences in costs of lost production. **Results:** Unadjusted regression analyses showed 80 fewer days of sickness absence in the 7-year follow-up for I-MORE

compared to O-ACT (95% CI - 264 to 104), with an adjusted difference of 114 fewer days (95% CI - 298 to 71). The difference in costs of production loss in favour of I-MORE was 27,048 euros per participant (95% CI - 35,009 to 89,104). **Conclusions:** I-MORE outperformed O-ACT in reducing sickness absence and production loss costs during seven years of follow-up, but due to a limited sample size the results were unprecise. Considering the potential for substantial societal cost savings from reduced sick leave, there is a need for larger, long-term studies to evaluate return-to-work interventions.

Aasdahl et al. 2025.

Journal of Occupational Rehabilitation, vol. 35, no. 2.

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Keywords: Cognitive therapy; mental health; musculoskeletal diseases; return-to-work; sick leave.

Evidence Level: 2B

Link: <https://link.springer.com/article/10.1007/s10926-024-10195-x>

Upper extremity joint tenderness as a practical indicator for assessing presenteeism in rheumatoid arthritis patients: A cross-sectional observational study

Objective: Rheumatoid arthritis (RA) causes chronic polyarthritis and joint dysfunction, reducing work productivity. This reduction is mainly due to presenteeism, characterized by impaired work performance despite being present at work. This study aims to investigate the impact of specific joint involvement, particularly in the upper extremities, on work disability in RA patients. **Methods:** Annual surveys assessing work disability were conducted among RA outpatients enrolled in the Nagahama Riumachi Cohort at Nagahama City Hospital, using the Work Productivity and Activity Impairment Questionnaire (WPAI). A multivariate regression analysis was performed to examine the cross-sectional and longitudinal associations between self-reported presenteeism and the tender joint count (TJC) in the extremities across two WPAI surveys. **Results:** The analysis included 201 patients, 52% of whom reported presenteeism. Cross-sectional analysis revealed a significant positive correlation between three or more TJCs of the upper extremity and presenteeism, with a regression coefficient (β) = 17.9 (95% confidence interval [CI]: 9.85-25.9). Among the joints evaluated, the sum of TJCs in the shoulder area (β = 9.55, CI: 5.39-13.7) and the fingers (β = 1.60, CI: 0.35-2.85) were significantly correlated with presenteeism. Additionally, change in presenteeism was significantly correlated with change in upper extremity TJCs (β = 1.41, CI: 0.05-2.77). No significant correlation was observed between lower extremity TJCs and presenteeism in these multivariate regression analyses. **Conclusions:** The upper extremity TJC is strongly associated with presenteeism in RA patients. Minimizing TJC in the upper extremities, particularly in the shoulders and fingers, could be important treatment goal to reduce work disability in RA patients.

Naito et al. 2025.

PLoS One, vol. 20, no. 6.

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Keywords: Rheumatoid arthritis; chronic polyarthritis and joint dysfunction; upper extremity.

Evidence Level: 4B

Link: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0318047>

Working life patterns after sickness absence due to depression: A 15-year register-based prospective cohort study

Aim: To identify working life patterns after sickness absence (SA) due to depression and sociodemographic, work, and health-related factors associated with them. **Methods:** The study cohort included 9139 Swedish residents, aged 25-40, with a new SA spell due to depression in 2005. We followed the cohort for 15 years analysing their yearly dominant labour market outcomes. Sequence analysis was used to identify distinct labour market sequences and cluster analysis - to group similar sequences into working life typologies. For the sociodemographic, work, and health-related factor analysis, we used multinomial logistic regression. **Results:** We identified 4373 sequences and seven typologies: 1) "Predominant Economic Activity (EA)" (70.7 %), 2) "Predominant EA with Intermittent SA/Disability Pension (DP)" (14.4 %), 3) "Predominant Long-Term SA/DP" (8.0 %), 4) "Long-Term SA/DP Followed by No EA" (2.2 %), 5) "SA/DP with Some EA" (1.6 %), 6) "Emigration" (1.7 %), and 7) "Death" (1.4 %). Factors associated with the predominant long-term SA/DP typology included birth outside Sweden (OR = 1.61, 95 % CI: 1.29-2.01), lower educational attainment (OR =

3.20, 95 % CI: 2.42-4.22), prolonged index SA spell due to depression (OR = 4.81, 95 % CI: 3.71-6.25), prior long-term SA (OR = 3.60, 95 % CI: 2.87-4.50) and unemployment (OR = 2.00, 95 % CI: 1.61-2.48). Living with children (OR = 0.68, 95 % CI: 0.56-0.82) was associated with lower odds of belonging to this typology.

Conclusions: Most individuals after SA due to depression maintained their engagement in the labour market suggesting that Sweden's welfare system is supportive of their workforce participation. However, some individuals belonged to long-term SA, DP, and lack of EA typologies indicating a potential path to labour market marginalization.

Stutaite et al. 2025.

Journal of Affective Disorders, vol. 379.

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Keywords: Cohort study; depression; disability pension; register study; sequence analysis; sick leave.

Evidence Level: 4B

Link: <https://www.sciencedirect.com/science/article/pii/S0165032725004100?via%3Dihub>

Socioeconomic impact of chronic delta hepatitis in Spain: Indirect costs of work absenteeism, presenteeism, and premature mortality

Introduction: Patients with chronic delta hepatitis (CDH) exhibit higher levels of morbimortality than those with hepatitis B only, generating higher indirect costs for society. The aim of this study was to estimate the loss of productivity and costs resulting from work absenteeism and presenteeism as well as premature mortality among patients with CDH in Spain. **Methods:** Patients with CDH in their working age (between 20-65 years) were estimated by an epidemiological flow model that incorporated the prevalence of infection with the hepatitis B and D viruses. To calculate the costs (year-2023) of absenteeism and presenteeism (over a time horizon of 1 year) as well as premature mortality (i.e., the period from death to expected retirement age), as measured in years of productive life lost (YPLL), the human capital method was used. Specific variables pertaining to the Spanish labour market (working population with hepatitis D virus (HDV), working days, average number of hours worked and gross annual salary) were considered for each sex and age group and distinguished based on infection status. All parameters were obtained from the literature and Spanish databases. **Results:** A total of 1,313 CDH patients of working ages (59% men, 41% women) and 97 patients who performed unpaid housework were identified. A total of 300,113 working hours were lost per year (29,015 hours/absenteeism and 271,098 hours/presenteeism), which entailed total annual costs of €4.5M (€536,400/absenteeism and €3.9M/presenteeism) related to CDH. Among patients of working ages, CDH was estimated to cause 28 annual deaths at a cost of €8.2 M, resulting in 449 YPLL at an average cost of €18,297/YPLL. The indirect costs were estimated to be € 12.7M.

Conclusions: CDH entails significant economic burdens for society. Consideration of the indirect costs associated with CDH is crucial with respect to the design of public health policies and interventions.

Buti et al. 2025.

PLoS One, vol. 20, no. 6.

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Keywords: Chronic delta hepatitis; Spain; socio-economic impact.

Evidence Level: 4B

Link: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0324834>

Workers Compensation

How much physiotherapy, chiropractic, and osteopathy care do compensated Australian workers with low back pain receive? A retrospective cohort study

Objectives: To identify the prevalence and frequency of physiotherapy, chiropractic, and/or osteopathy care in Australians with workers' compensation claims for low back pain (LBP). **Methods:** We included workers with accepted workers' compensation claims longer than 2 weeks from the Australian states of Victoria, Queensland, South Australia, and Western Australia. Workers were grouped by whether they attended physiotherapy, chiropractic, and/or osteopathy in the first 2 years of their claim. Descriptive

statistics and logistic regression were used to describe differences between groups. Descriptive statistics and negative binomial regression were used to describe differences in the number of attendances in each group. **Results:** Most workers had at least one physical therapy attendance during the period of their claim (n = 23,619, 82.0%). Worker state, socioeconomic status, and remoteness were the largest contributing factors to likelihood of physical therapy attendance. Most workers only attended physiotherapy (n = 21,035, 89.1%, median of 13 times). Far fewer only attended chiropractic (n = 528, 2.2%, median of 8 times) or only osteopathy (n = 296, 1.3%, median of 10 times), while 1,750 (7.5%) attended for care with more than one type of physical therapy (median of 31 times). **Conclusion:** Most Australian workers with workers' compensation time loss claims for LBP attend physiotherapy at least once during their claims. State of claim is the strongest predictor of which physical therapy profession they attend, possibly due to regional availability. Workers who see a physiotherapist have significantly more attendances. Future research should explore the relationship between these patterns of care and claimant outcomes, including work disability duration.

Di Donato et al. 2025.

Journal of Occupational Rehabilitation, vol. 35, no. 2.

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Keywords: Compensation; low back pain; physical therapy; workers.

Evidence Level: 4A

Link: <https://link.springer.com/article/10.1007/s10926-024-10202-1>

The association of physiotherapy continuity of care with duration of time loss among compensated Australian workers with low back pain

Purpose: The aims of this study are to determine how continuous the care provided by physiotherapists to compensated workers with low back pain is, what factors are associated with physiotherapy continuity of care (CoC; treatment by the same provider), and what the association between physiotherapy CoC and duration of working time loss is. **Methods:** Workers' compensation claims and payments data from Victoria and South Australia were analysed. Continuity of care was measured with the usual provider continuity metric. Binary logistic regression examined factors associated with CoC. Cox regression models examined the association between working time loss and CoC. **Results:** Thirty-six percent of workers experienced complete CoC, 25.8% high CoC, 26.1% moderate CoC, and 11.7% low CoC. Odds of complete CoC decreased with increased service volume. With decreasing CoC, there was significantly longer duration of compensated time loss. **Conclusion:** Higher CoC with a physiotherapist is associated with shorter compensated working time loss duration for Australian workers with low back pain.

Gray et al. 2025.

Journal of Occupational Rehabilitation, vol. 35, no. 2.

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Keywords: Continuity of care; low back pain; physiotherapy; Workers' compensation.

Evidence Level: 4A

Link: <https://link.springer.com/article/10.1007/s10926-024-10209-8>

Working hours

Inability to work fulltime and the association with paid employment one year after the Work Disability Assessment: A Longitudinal Register-Based Cohort Study

Objectives: Disability benefit applicants with residual work capacity are often not able to work fulltime. In Dutch work disability benefit assessments, the inability to work fulltime is an important outcome, indicating the number of hours the applicant can sustain working activities per day. This study aims to gain insight into the association between inability to work fulltime and having paid employment 1 year after the assessment. **Methods:** The study is a longitudinal register-based cohort study of work disability applicants who were granted a partial disability benefit (n = 8300). Multivariable logistic regression analyses were conducted to study the association between inability to work fulltime and having paid employment 1 year after the assessment, separately for working and non-working applicants. **Results:** For disability benefit

applicants, whether working (31.9%) or not working (68.1%) at the time of the disability assessment, there was generally no association between inability to work fulltime and having paid employment 1 year later. However, for working applicants diagnosed with a musculoskeletal disease or cancer, inability to work fulltime was positively and negatively associated with having paid employment, respectively. For non-working applicants with a respiratory disease or with multimorbidity, inability to work fulltime was negatively associated with paid employment. **Conclusions:** Inability to work fulltime has limited association with paid employment 1 year after the disability benefit assessment, regardless of the working status at the time of assessment. However, within certain disease groups, inability to work fulltime can either increase or decrease the odds of having paid employment after the assessment.

Boersema et al. 2025.

Journal of Occupational Rehabilitation, vol. 35, no. 2.

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Keywords: Chronic diseases; disability evaluation; employment; registry data; work capacity evaluation.

Evidence Level: 4B

Link: <https://link.springer.com/article/10.1007/s10926-024-10212-z>

Long working hours related to elevated psychological distress among United States pregnant workers: Findings from the National Health Interview Survey

Long working hours and psychological distress have each been related to adverse maternal health and birth outcomes. Understanding the potential psychological health impacts of long working hours among pregnant workers may support the implementation of maternity work protections in the United States (U.S.). This cross-sectional study among a weighted sample of 3637 pregnant workers from the U.S. population-based National Health Interview Survey (NHIS) 1997-2018 aimed to examine the association of working hours with psychological distress. Multivariable linear regression models analysed associations between categories of weekly working hours and continuous scores of psychological distress measured by the Kessler 6 (K6) scale, while accounting for demographic, socioeconomic, behaviour and health characteristics. In the fully adjusted model, compared to the standard workweek of 35-40 h/week, working ≥ 49 h/week was associated with higher psychological distress [β (SE): 0.59 (0.21); $p = .0058$]. This initial evidence connecting excessive working hours with increased psychological distress among a U.S. sample of pregnant women supports clinical practices in prenatal assessments of occupational risk factors, and the provision of work-related resources and work accommodations. Future research is warranted to investigate potential occupational effects on maternal mental health throughout the course of pregnancy and postpartum using cohort studies.

Guardiano et al. 2025.

Journal of Psychosomatic Obstetrics & Gynecology, vol. 46, no. 1.

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Keywords: Pregnancy; mental health; perinatal epidemiology; psychological wellbeing; women's health.

Evidence Level: 4B

Link: <https://www.tandfonline.com/doi/full/10.1080/0167482X.2025.2521780>

Association of long working hours with psychological distress in men with pregnant partners: An observational study from the Japan Environment and Children's Study

Background: It has been suggested that working long hours affects workers' mental health, although findings have been inconsistent. In this study, we investigated the association of working hours with psychological distress in a population of Japanese men with pregnant partners, using data from the Japan Environment and Children's Study. **Methods:** Data from 44,996 men were analysed and weekly working hours were classified into six groups. The Kessler Psychological Distress Scale (K6) was used to assess mental health. Each of the six items were assessed on a 5-point scale (0-4), with a total score of 0-24 and higher scores indicating greater psychological distress. A total score of 5-12 was considered to indicate moderate psychological distress and a score of ≥ 13 to indicate severe psychological distress. To investigate the association of working hours with psychological distress, multinomial logistic regression analysis was performed to calculate odds ratios (ORs) and 95% confidence intervals (CIs). **Results:** The results showed

that after adjusting for covariates, weekly working hours was positively associated with moderate and severe psychological distress. Compared with men who worked ≤ 40 h per week, those who worked >55 to ≤ 65 h or >65 h per week had significantly higher ORs (95% CIs) for moderate psychological distress, 1.12 (1.03-1.21) and 1.34 (1.24-1.45), respectively, and those working >65 h per week had significantly higher OR, 1.84 (1.47-2.32) for severe psychological distress. For these two outcomes, a significant p for trend ($<.0001$) was observed in both the crude and adjusted models. **Conclusion:** The results of this study suggest that the greater time constraints resulting from working long hours are associated with psychological distress in Japanese men with pregnant partners.

Inadera et al. 2025.

PLoS One, vol. 20, no. 6.

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Keywords: Long working hours; psychological distress; partners; pregnant women.

Evidence Level: 4B

Link: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0326864>

Wellness Programs

Effectiveness of workplace interventions for health promotion

Workplaces are an important setting for health promotion, offering established infrastructure, daily access to large populations, and opportunities to engage groups that are often under-represented in such initiatives. Although the effectiveness of workplace health promotion has been evaluated in reviews focusing on specific interventions, a comprehensive overview is needed. To address this gap, we present a quality-informed horizontal analysis encompassing 88 reviews and 339 meta-analysed effect estimates published between 2011 and 2024, covering a broad range of workplace health interventions. Mental health and stress reduction were the most frequently studied targets (36%), followed by weight management and cardiometabolic health (25%), health-related behaviours (22%), and musculoskeletal disorders and pain (17%). According to the GRADE assessment, 71 (21%) of the 339 meta-analysed effect estimates provided evidence of moderate quality, and the remainder were categorised as low or very low quality, with none classified as high quality. Mindfulness showed effectiveness across multiple stress and mental health outcomes, and cognitive behavioural techniques, stress management, physically oriented methods, and e-health interventions also showed some effectiveness. Multicomponent interventions had small but measurable effects on weight loss, glucose levels, fruit intake, and seasonal influenza vaccination uptake. A variety of behavioural, physical activity, environmental, multicomponent, and e-health interventions influenced physical activity and sedentary time at work. Consistent with findings found in non-occupational settings, effects at the individual level were generally modest but could be meaningful at both the workplace and population levels. In this Review we also discuss the broader public health implications of workplace health promotion, and highlight the strengths and limitations of the existing evidence and propose directions for future research.

Virtanen et al. 2025.

The Lancet Public Health, vol. 10, no. 6.

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Keywords: Workplace intervention; health promotions.

Evidence Level: 1A

Link: [https://linkinghub.elsevier.com/retrieve/pii/S2468-2667\(25\)00095-7](https://linkinghub.elsevier.com/retrieve/pii/S2468-2667(25)00095-7)

A scoping review of UK local government workplace health and wellbeing programmes

Background: Workplace settings are linked to staff health and wellbeing, affecting sickness absence, presenteeism and productivity. With the growing prevalence of health issues among employees in the UK, including stress and long-term conditions, effective workplace health and wellbeing support by local government can play a crucial role in keeping people economically active and well. **Objective:** Identify and characterise workplace health and wellbeing programmes offered by local authorities within the United Kingdom. **Methods:** A scoping review involved a comprehensive search of Local Authority Districts (LADs)

and county councils' websites followed by direct communications between 1 January 2024 and 30 April 2024. Initiatives were included if they were designed to enhance workplace health and wellbeing, actively ongoing and offered at no cost to workplaces. Data were extracted on the initiative name, provider, deprivation level, health focus, workplace eligibility and accreditation processes.

Results: The review identified 61 active local government workplace health programmes across the UK in March 2024, reflecting a 21% provision among local authorities. These initiatives were homogenous in focus, scope of coverage and implementation methods, with all focusing on general health. Geographical mapping highlighted regional disparities in the provision of workplace health and wellbeing initiatives that are free at the point of access (WHISPs). England had a higher number (Central, Southern, and Southeastern regions specifically) while the rest of England, Wales, Scotland and North Ireland had a lower number or no WHISPs. **Conclusion:** There is a need for more coordinated efforts to increase the visibility and accessibility of local government workplace health initiatives that are free at the point of access. National workplace health accreditation could further encourage employers to adopt health and wellbeing programmes.

El-Osta et al. 2025.

BMC Public Health, vol. 25, no. 1.

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Keywords: Employee health; public health; sickness absence; UK; wellbeing initiatives; workplace health.

Evidence Level: 1B

Link: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-025-23176-3>

Preconception health assessments in occupational settings: Counselling versus written feedback

Aim: Our preconception care (PCC) initiative in Akita (Japan) was previously reported to improve health literacy and motivate behavioural changes. To make the check-up widely available, a more feasible and sustainable system is necessary. Our aim was to evaluate a resource-efficient preconception check-up implemented in Ehime Prefecture. **Methods:** The Ehime PCC check-up included female employees aged 18-39 and took place between July 2023 and January 2024. Participants attended a lecture, underwent blood tests, and received written feedback. Pre- and post-intervention surveys were conducted for check-up evaluation. **Results:** Fifty-nine women (median age: 31 years) participated. The results revealed that their health was inadequate for future pregnancies, with 23% exhibiting anaemia (haemoglobin <12.0 g/dL) and 29% iron deficiency (serum ferritin <12 ng/mL). Furthermore, all participants had low 25-hydroxyvitamin D levels (<30 ng/mL). After receiving written feedback, 66% manifested an intention to improve their lifestyle, 21% an intention to consult an obstetrician and gynaecologist, and 32% expressed a desire to become pregnant sooner. The proportion of those without intention to change their future behaviour was significantly higher in Ehime (23.7%) compared to Akita (4.9%, $p = 0.018$). Recommendation ratings were significantly lower in Ehime (strongly recommend: 18.2% vs. 65.9%, $p < 0.001$), with more reporting anxiety (10.5% vs. 4.9%, $p = 0.02$). **Conclusions:** Preconception check-ups improved the intention to change behaviour, even in resource-efficient settings. However, individual counselling may be more effective than written feedback in increasing the intention to change behaviour and satisfaction. A resource-efficient feedback method that effectively motivates behavioural change and improves satisfaction is required.

Fujishima et al. 2025.

Obstetrics and Gynaecology, vol. 51, no. 6.

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Keywords: Fertility awareness; health counseling; preconception care; reproductive health service; women's health.

Evidence Level: 4B

Link: <https://obgyn.onlinelibrary.wiley.com/doi/10.1111/jog.16337>

Organisational Issues

Organisational kindness and compassion: what are the barriers, enablers and outcomes for clients and stakeholders?

Unkind bureaucratic policies such as the Australian Robodebt policy, which targeted welfare recipients with automatic debt letters, and are geared towards economic savings, can significantly harm those impacted by them. Compassion and kindness are receiving increased research attention related to how organisations work internally. However, a greater investment in studies is needed to increase understandings about how compassion and kindness can underpin interactions with external stakeholders. Addressing this research gap, we aimed to identify barriers, enablers and outcomes to organisational kindness and compassion informed by the literature, and to propose future research directions related to organisational kindness and compassion towards external stakeholders. A search of four scholarly databases identified 25 relevant publications. Thematic analysis of included publications revealed barriers of commodification, personal risks, dysfunctional environments, inauthentic attempts at, and a lack of understanding of the need to be compassionate or kind. Enablers included building compassion into organisational policies, processes, practices and activities, compassion contagion, training of staff, leading with compassion, and kind and compassionate communication. Outcomes of kindness included building positive and healthy relationships with stakeholders, supporting positive experiences among stakeholders, and contributing to an organisation's profitability, productivity, performance and standing in the community. We conclude by recognising that kindness is essential for ongoing trust in health and social care institutions and government policy.

Smith-Merry et al. 2025.

PLoS One, vol. 20, no. 6.

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Keywords: Organisational kindness; compassion; barriers; clients; stakeholders.

Evidence Level: 1A

Link: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0312450>

Relationship between female employees and firm's innovation: Evidence from Japanese companies

This study investigates how female employees contribute to firm innovation by applying panel data Poisson regression models to data pertaining to 144 major Japanese manufacturing firms from 2004 to 2022. The results reveal the following: First, there is a positive relationship between longer female employment and innovation. Longer female employment may be attributable to female employees feeling more secure at their workplaces. Second, regarding women's unique perspectives, this study suggests that female participation in innovation may increase the number of technological fields. Third, this study presents the mediating effects of technological fields on the relationship between high-impact innovation and the demographic of female employees. These findings suggest corporate management creates a system that allows female employees to play an active role in the workplace with long-term employment. The empirical results provide new insights into previous literature on corporate innovation, specifically technological innovation.

Ichikawa et al. 2025.

PLoS One, vol. 20, no. 6.

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Keywords: Female employees; innovation; Japan.

Evidence Level: 4B

Link: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0323751>

Retrospective review of a carer-employee workplace intervention

In response to a growing aging population, carer-employees - who balance both unpaid care and paid employment, have become an increasingly normative phenomenon. In order to support the growing population of carer-employees, some employers have implemented carer-friendly workplace policies aimed at keeping carer-employees employed and healthy. This study sought to retrospectively review the effectiveness of one such carer-employee workplace intervention which had been implemented in a post-

secondary institution located in Southern Ontario. The study consisted of a thematic analysis of fourteen semi-structured post-intervention interviews from carer-employee participants. A thematic analysis of the interview transcripts revealed the following themes: (i) the pre-existing circumstances of participants; (ii) recommendations made by participants to improve the intervention; (iii) benefits participants received from the intervention; and (iv) factors limiting the benefits participants received from the intervention. Furthermore, the thematic analysis revealed several positive outcomes commonly experienced by intervention participants, namely: improvements in self-reported mental and physical wellbeing, greater self-confidence in caregiving abilities, and access to respite. These findings align with the larger literature on carer-employees and caregiver-friendly workplace policies.

Williams et al. 2025.

Evaluation and Program Planning, vol. 111.

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Keywords: Care-giver support; caregiving; carer-employees; workplace support.

Evidence Level: 4B

Link: <https://www.sciencedirect.com/science/article/pii/S0149718925000874?via%3Dihub>

Prioritizing organizational success and the pursuit of victory: Understanding the feelings of exclusion in the workplace

This study investigates how an organizational bottom-line mentality (BLM) climate influences employee perceptions of workplace ostracism, with a focus on the moderating role of zero-sum beliefs (ZSB). Using a survey of 220 full-time respondents in the United States, we conducted regression analysis and moderated mediation tests via Hayes' PROCESS macro in R. We measured perceived organizational BLM, employee BLM, ZSB, and work ostracism using validated scales. The results supported all five hypotheses. An organizational BLM climate positively influences employee BLM, which in turn increases perceptions of ostracism. This relationship is stronger for employees with high ZSB. Additionally, the indirect effect of an organizational BLM climate on ostracism through employee BLM is significantly moderated by ZSB. The findings highlight that employees with high ZSB experience greater ostracism in high-BLM environments. Drawing on Social Cognitive Theory (SCT) this study investigates and underscores the negative interpersonal outcomes of a BLM climate. By addressing zero-sum beliefs through targeted interventions, organizations can balance financial objectives with employee well-being, enhancing workplace dynamics and morale.

Keeler et al. 2025.

Acta Psychologica, vol. 257.

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Keywords: Bottom-line mentality; group dynamics; workplace ostracism; zero-sum belief.

Evidence Level: 5B

Link: <https://www.sciencedirect.com/science/article/pii/S0001691825004627?via%3Dihub>

Job Design

Workplace accommodations for low-wage workers: A scoping review

Background: Low-wage workers carry a disproportionate burden of chronic condition morbidity due to their overall socioeconomic disadvantage and the risks accrued from low-wage work environments. Studies show low-wage work is linked to more occupational hazards, higher physical demands, more stress, lack of access to health insurance coverage and paid sick leave, and poverty - all of which result in poorer health. Work accommodations are modifications in the workplace setting that can help minimize health-related work limitations, and in some countries, employers are required to make "reasonable accommodations," by law, for workers with chronic health conditions. **Objective:** The purpose of this scoping review is to identify what is known about work accommodations for low-wage workers globally. **Methods** A systematic search of literature, using the PRISMA-ScR protocol, was conducted in PubMed, CINAHL, and Scopus databases through July 2024. Screening and data abstraction were performed by two independent

reviewers. Studies that incorporated work accommodations as a variable and provided findings specific to low-wage workers were included. **Results:** The search produced 473 citations; 14 met inclusion criteria. Health conditions represented were variable. Most studies used descriptive designs, and over half used a qualitative approach. **Conclusion:** More studies are needed reflecting low-wage workers' requests for and receipt of work accommodations. Work accommodations may be an important target for intervention among populations with chronic health conditions towards reducing morbidity, work limitations, and health inequities.

McArthur et al. 2025.

WORK: A Journal of Prevention, Assessment & Rehabilitation, vol. 81, no. 2.

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(<https://creativecommons.org/licenses/by-nc/4.0/>)

Keywords: Chronic condition; chronic disease; chronic illness; socioeconomic disadvantage; socioeconomic disparities in health; workforce; working conditions; workplace.

Evidence Level: 1A

Link: <https://pubmed.ncbi.nlm.nih.gov/39973633/>

Unraveling job demand-control-support patterns and job stressors as predictors: Cross-sectional latent profile and network analysis among Italian hospital workers

The Job Demand-Control-Support (JDCS) model postulates that patterns of job demand, job control, and social support lead to eight job types that are associated with well-being and health. This study employed latent profile analysis (LPA) to identify JDCS profiles among Italian hospital workers (n = 1464) and examined the predictive roles of role clarity and negative relationships at work on profile membership. Furthermore, adopting a network perspective, this study explored the interrelationships among JDCS factors within each identified profile. The LPA results revealed four profiles: isolated prisoner, moderate strain, low strain, and participatory leader. In addition, role clarity increased the likelihood of being included in the low-strain, moderate-strain, and participatory leader profiles. In contrast, negative relationships at work increased the risk of being included in the isolated prisoner profile. Finally, the results of network analysis revealed that networks differed across profiles in terms of density (interconnections between nodes) and edge strength (magnitude of relationships between nodes). Our study extends previous JDCS research by highlighting that researchers should consider empirically identified profiles rather than theoretically defined subgroups. The implications for stress theory, future research, and practice are also discussed.

Portoghese et al. 2025.

PLoS One, vol. 20, no. 6.

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Keywords: Job-demand; patterns; job stressors; Italian.

Evidence Level: 4B

Link: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0325528>

Shift Work

The efficacy of interventions in the workplace promoting exercise and a healthy diet among shift workers: A systematic review

Introduction: Chronic non-communicable diseases (CNCDs) are a major public health concern, with significant impacts on quality of life and health costs. Shift work is a risk factor associated with these diseases, since it interferes with circadian rhythms and physiological processes, and can lead to circadian desynchronization and sleep deprivation. Given this scenario, the workplace is recognized by the WHO as a strategic environment for promoting health and preventing CNCDs. **Objective:** To analyze the scientific evidence regarding the efficacy of interventions to promote healthy eating and/or physical activities among shift workers. **Methods:** Systematic review protocol scientific databases in the field of health: MEDLINE (via PUBMED), Excerpta Medica Database (Embase), Latin American and Caribbean Literature in Health Sciences (LILACS), Web of Science and Scientific Electronic Library Online (SciELO), between January 2013 and

December 2023, and was registered in the database for the study of the systematic review PROSPERO, under number: CRD42024517563. The risk of bias was analysed according to the assessment tool, RoB 2.0 (Revised Cochrane risk-of-bias tool for randomized trials), two of the studies were evaluated using the risk of bias tool by the Non-randomized Studies - of Interventions (ROBIN I). **Results:** The electronic search resulted in 2361 relevant articles based on the database search. After removing duplicates and articles that did not meet the inclusion criteria, 366 articles were identified. Thirteen articles were selected for full-text review, and 7 articles were included. **Discussion:** The selected studies show that health interventions in the workplace, although with differences in the types of interventions and populations, have favourable results. Strategies aimed at nutritional support and physical activity, with the use of technologies such as motivational messages, have shown a positive impact, which is amplified when it is possible to involve workers and adapt them in the workplace. The diversity in study designs offers a broad perspective, but the variability in research methods also brings significant challenges for comparability, which justifies the decision not to carry out a meta-analysis. In addition, most studies focus on short-term interventions and outcomes, which may not adequately reflect the long-term health benefits or risks associated with shift work. **Conclusion:** The diversity of interventions suggests that there is no single solution to promote health at the workplace. The strategies can be adapted to the specific needs and contexts of the workers and working environments. The adherence of the managers is a way of reinforcing the importance of preventative actions and allows a better adaptation of the organizational context to these activities. The lack of long-term follow-up and continued adherence are challenges that need more investment and organizational policies to ensure the effectiveness of the actions.

Dos Reis et al. 2025.

PLoS One, vol. 20, no. 6.

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Keywords: Workplace; exercise; diet; workplace promotion; shift workers.

Evidence Level: 1A

Link: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0325071>

Association between night shift work and markers of metabolism, cardiovascular and immune system in a population-based German cohort

In humans, night shift work is a major reason for chronodisruption, may affect health and increase the risk of a metabolic syndrome, but results obtained so far are ambiguous. In this population-based, cross-sectional study, PRESENT and FORMER shift workers were compared to age- and sex-matched controls, who never worked in shift with regard to body mass index, waist-hip-ratio total, high-density lipoprotein and low-density lipoprotein, cholesterol and C-reactive protein. Moreover, association with sex, length of shift work and medication were investigated. The present results do not support the hypothesis that night shift work per se is associated to an increased risk of metabolic syndrome, and cardiovascular and immune malfunctions: no differences were found in mean anthropometric and blood values between present or former shift workers and respective matched controls. When analysing the proportion of participants showing values beyond the clinically relevant cut-offs, no general effect of shift work was observed, but the data may suggest an interaction between shift work and sex. These divergent results may be due to differences in the socio-economic status, the health care system and the shift schedule. All these parameters need to be considered in future studies addressing the impact of night shiftwork on human health.

Bittner et al. 2025.

GeroScience, vol. 47, no. 3.

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Keywords: Anthropometric and blood values; interaction with sex; night shift work; risk for human health.

Evidence Level: 4B

Link: <https://link.springer.com/article/10.1007/s11357-025-01596-8>

Association of shift work and lifestyle with aortic aneurysm Incidence: A large prospective cohort study in the UK Biobank

Background: Shift work is associated with various health problems, but its impact on aortic aneurysm (AA) is unclear. The role of lifestyle factors in this regard is also less clear. This study aimed to explore the combined effects of shift work and lifestyle on AA risk. **Methods:** A total of 213971 employed or self-employed participants from the UK Biobank were included in the study. Employment and lifestyle information was collected. Cox proportional hazards regression models were applied to assess the association between shift work and AA. Restricted cubic spline functions, mediation, interaction, and joint analyses were used to further explore the relationship between unhealthy lifestyle, shift work, and AA risk. **Results:** Among 213 971 participants, 1035 developed AA during a mean follow-up of 14.9 years. In fully adjusted models, shift work was associated with a significantly higher risk of AA (hazard ratio [HR], 1.24 [95% CI, 1.06-1.46]), with frequent shift workers showing an elevated risk (HR, 1.27 [95% CI, 1.03-1.57]). A dose-dependent relationship was observed between the unhealthy lifestyle score and the risk of AA, with the risk of AA increasing as the unhealthy lifestyle score increased. The joint effect of shift work and unhealthy lifestyle showed a significant association, particularly among shift workers with 4 to 5 unhealthy lifestyle factors (HR, 2.26 [95% CI, 1.63-3.14]). **Conclusions:** In this cohort study, we found that shift work was significantly associated with an increased risk of AA. Additionally, unhealthy lifestyles, particularly smoking, may play a crucial role in this association. These findings underscore the need for targeted prevention strategies, especially for shift workers with unhealthy lifestyle factors.

Liu et al. 2025.

Journal of the American Heart Association, vol. 14, no. 2.

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Keywords: UK Biobank; aortic aneurysm; shift work; unhealthy lifestyle.

Evidence Level: 4B

Link: <https://www.ahajournals.org/doi/10.1161/JAHA.124.040481>

Associations between shift work and biological age acceleration: A population-based study

Background: This study aimed to examine the associations between shift work and biological age acceleration (BAA) and to explore potential moderating factors that may influence the associations.

Methods: A population-based study was conducted using data from 195 419 participants in the UK Biobank (mean age: 52.71 years; 49.1% male), all of whom were either in paid employment or self-employed. Biological age was assessed using 2 distinct algorithms, namely, the Klemmer-Doubal method Biological Age (KDM-BA) and Phenotypic Age (PhenoAge). BAA was derived by the residuals with regressing biological age on chronological age. **Results:** Among 195 419 participants, 31 495 (16.1%) were shift workers, and 15 925 (8.1%) worked night shifts. Shift workers were more likely to have chronic diseases, unhealthy lifestyles, and poor sleep. Shift and night shift work were significantly associated with increased BAA, with higher risks observed in irregular and permanent night shifts. Subgroup analyses showed greater BAA risks in younger workers, males, and those with high BMI or poor sleep. Significant interactions were found between shift work and sex, socioeconomic status, educational level, ethnicity, cancer, lifestyle, and sleep status. Males had higher risks of KDM-BA Acceleration from irregular and permanent night shifts, while females showed increased PhenoAge Acceleration risks with evening/weekend shifts. **Conclusions:** The present study underscored the need for better work-hour scheduling and targeted interventions for high-risk populations, which may help mitigate biological age acceleration associated with shift work.

Wang et al. 2025.

GeroScience, vol. 47, no. 3.

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Keywords: Biological age acceleration; night shift work; shift work; UK Biobank.

Evidence Level: 4B

Link: <https://link.springer.com/article/10.1007/s11357-025-01575-z>

Management and Leadership

The relationship between strategic human resource management practices and the employment of vulnerable workers: A two-wave study among employers

Purpose: To improve the inclusion of vulnerable workers in the labour market, employer behaviour is key. However, little is known about the effectiveness of strategic Human Resource Management (HRM) practices that employers use to employ vulnerable workers. Therefore, this exploratory study investigates the association between strategic HRM practices (based on social legitimacy, economic rationality and employee well-being) and the actual and intended employment of vulnerable workers in the future.

Methods: In total, 438 organizations included in the Netherlands Employers Work Survey participated in a two-wave study with a nine-month follow-up period. Logistic regression models were used to estimate the relationship between strategic HRM practices (T0) with the employment of vulnerable workers (T1) and intentions to hire vulnerable workers (T1), while controlling for organizational size, sector, and employment of vulnerable workers at baseline. **Results:** Employers who applied strategic HRM practices based on social legitimacy (e.g., inclusive mission statement or inclusive recruitment) or economic rationality (e.g., making use of reimbursements, trial placements, or subsidies) at T0 were more likely to employ vulnerable workers and to intend to hire additional vulnerable workers at T1. No significant results were found for practices related to employee well-being. **Conclusion:** Since different types of strategic HRM practices contribute to the inclusion of vulnerable workers, employers can build on their strategic priorities and strengths to create inclusive HRM approaches. Future research is needed to study whether these strategic HRM domains also relate to sustainable employment of vulnerable workers.

Kersten et al. 2025.

Journal of Occupational Rehabilitation, vol. 35, no. 2.

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Keywords: Employer engagement; human resource management; inclusion; vulnerable workers.

Evidence Level: 4B

Link: <https://link.springer.com/article/10.1007/s10926-024-10197-9>

The association between financial performance and occupational injuries/diseases in workplaces of South Korea: Interpretation based on managerial characteristics of workplaces

Introduction: This study investigated the association between the financial performance of workplaces and the incidence of occupational injuries and diseases using the Workplace Panel Survey, a workplace-related national statistical survey in South Korea. **Methods:** The dependent variables were those related to the incidence of occupational injuries and diseases. The independent variables were those related to the financial performance of each workplace. Multilevel Poisson regression (or logistic regression) and linear regression analyses were used. **Results:** For the number of victims, the average number of workers, interest income, interest expenses, and value-added per person were associated with a significantly increased relative risk (RR). In contrast, lease expense₂, depreciation and amortization, and initial/ending industrial property rights were associated with a significant decrease in RR. For the existence of occupational injuries/diseases, taxes and duties₁, and welfare/benefits expenses were associated with a significant increase in the odds ratio (OR). In contrast, severance pay₂, depreciation/amortization, and average number of workers were associated with a significant decrease in OR. **Discussion:** As the financial status of workplaces worsened, the incidence of occupational injuries and diseases increased. In contrast, as the operating profit and amount of tangible assets (subject to depreciation and amortization) of workplaces increased, the incidence of occupational injuries and diseases decreased. As the number of workers increased, the number of occupational injuries and diseases also increased; however, the odds of occupational injury or disease decreased. The decreasing number of occupationally injured or diseased workers, along with the increasing number of transport devices, might have resulted from special consignment subcontracts between cargo truck owners and shipping companies in South Korea.

Moon et al. 2025.

European Journal of Medical Research, vol. 30, no. 1.

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Keywords: Financial performance; Financial statements; Managerial characteristics; Occupational injuries and diseases; Occupational safety and health; South Korea.

Evidence Level: 4B

Link: <https://eurjmedres.biomedcentral.com/articles/10.1186/s40001-025-02698-x>

Work Ability

The association between menstrual disorders and workforce participation: A prospective longitudinal study

Objective: To assess the association between menstrual disorders and workforce participation among Australian women. **Design:** Population-based cohort study. **Setting:** Secondary analysis of eight surveys collected between 2000 and 2021. **Population:** A total of 11 152 Australian women, born between 1973 and 1978. **Methods:** Between 2000 and 2021, self-reported longitudinal survey data were collected. At each survey, menstrual disorders and workforce participation were measured. Data were analysed using generalised estimating equations for multinomial responses, with stratification by age. **Main outcome measures:** Workforce participation. **Results:** Women who often experienced premenstrual tension reported lower odds of working part-time compared to full-time work (Adjusted Odds Ratio (AOR) = 0.74; 95% CI: 0.61, 0.90), with this finding strongest among women aged 31 to 40 (AOR = 0.68, 95% CI: 0.59, 0.78). While overall, women who often experienced irregular periods had higher odds of working part-time compared to full-time (AOR = 1.32, 95% CI: 1.08, 1.61), women aged 22 to 30 had lower odds of working part-time (AOR = 0.61, 95% CI: 0.39, 0.97). Women who experienced severe period pain had higher odds of being unemployed compared to working full-time (AOR = 1.18; 95% CI: 1.01, 1.36), with this association strongest in women aged 41 and older (AOR = 1.19, 95% CI: 1.01, 1.40). **Conclusions:** There is substantial variation in the association between menstrual disorders and workforce participation, and the role of women's ages in these associations. Increased awareness of and further elucidation of these factors may improve women's engagement in the workforce.

Alemu et al. 2025.

BJOG: An International Journal of Obstetrics and Gynaecology, vol. 132, no. 7.

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Keywords: Employment; menorrhagia; menstrual health; morbidity; workforce participation.

Evidence Level: 4A

Link: <https://obgyn.onlinelibrary.wiley.com/doi/10.1111/1471-0528.18109>

Understanding work ability in employees with pain and stress-related ill-health: An explorative network analysis of individual characteristics and psychosocial work environment

Purpose: There is a wide range of individual and work environment factors that influence work ability among workers with pain and stress-related ill-health. The multiple interactions and overlap between these factors are insufficiently understood, and a network approach could mitigate limitations of previous research. This pilot study aimed to explore interactions between individual characteristics and psychosocial work environment and potential links to long-term work ability. **Methods:** Prospective data from a prevention project was used. Individuals (N = 147) with pain and/or stress-related ill-health (95% women) at public sector workplaces filled out baseline questionnaires about a collection of individual and work environment factors, which were used for constructing undirected networks. The model was run in three subsamples of workplaces. Finally, a separate model was established with work ability at 6-month follow-up as outcome variable. A shortest pathway analysis was calculated to identify mediators of work ability. **Results:** Symptom catastrophizing and perceived stress were the most influential factors in all network models. Symptom catastrophizing and pain-disability risk were found to mediate the relation between perceived stress and long-term work ability. Further, demand-control-support factors were interrelated, and patterns of interaction differed between different types of workplaces. **Conclusion:** The findings support the importance of individual factors, specifically symptom catastrophizing in an individual's coping with pain or stress-problems and its influence on long-term work ability. Catastrophizing might play a role in stress-related disorders which should be further investigated. Individual and work environment factors

interact and vary across context, which needs to be taken into consideration to prevent pain and stress-related ill-health at work.

Zetterberg et al. 2025.

Journal of Occupational Rehabilitation, vol. 35, no. 2.

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Keywords: Chronic pain; network analysis; stress symptoms; work ability.

Evidence Level: 4B

Link: <https://link.springer.com/article/10.1007/s10926-024-10200-3>

The condition of subjective daytime sleepiness and its related decline in work productivity among daytime workers

Background: Few have examined the condition of subjective daytime sleepiness in workers and its relation to their work productivity. This study aimed to clarify the association between the presence of subjective daytime sleepiness and work productivity measures, including presenteeism and absenteeism, as well as factors related to the presence of the symptom in daytime workers. **Methods:** This cross-sectional study included 17,963 daytime workers who attended the annual medical check-up. They were categorized into four groups; the daytime sleepiness group was defined as having only subjective daytime sleepiness, the insomnia group as having only insomnia symptoms, the combination group as having both subjective daytime sleepiness and insomnia symptoms, and the healthy group as having no sleep complaints. This study used demographics, health status, workplace, work productivity, and sleep items included in the self-reported medical check-up questionnaire. **Results:** The combination group had significantly worse presenteeism than other groups. The daytime sleepiness and insomnia groups had significantly worse presenteeism than the healthy group. The results of absenteeism were the same as presenteeism. Factors related to the positivity for subjective daytime sleepiness were presence of psychiatric disease, the positivity for habitual snoring and/or witnessed apnoea, shorter sleep duration on workdays, long working hours, female sex, living alone, the amount of social jetlag, and younger age. **Conclusion:** Subjective daytime sleepiness, not just insomnia symptoms, has a significant negative impact on work productivity, and both workplace and individual approaches should not be ignored for addressing subjective daytime sleepiness among daytime workers.

Takano et al. 2025.

Journal of Epidemiology, vol. 35, no. 6.

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Keywords: Daytime workers; sleep duration; sleepiness; work productivity; working hours.

Evidence Level: 4B

Link: https://www.istage.jst.go.jp/article/jea/35/6/35_JE20240295/_article

Craniofacial trauma increases the risk of temporomandibular joint disorders and days of work disability: A SWEREG-TMD registry-based study

Although craniofacial (CMF) trauma is a factor recognized as contributing to the development of temporomandibular joint disorders (TMJD), large population-based research on CMF trauma and subsequent TMJD is lacking. Additionally, it is unknown how previous CMF trauma affects work disability reimbursements for patients with TMJD (pwTMJD). This Swedish registry-based study included 33,315 pwTMJD matched to 333,122 individuals from the general population. Both a case-control design and a cohort design were used in this study to evaluate the association between CMF trauma and TMJD, and to investigate how CMF trauma impacts the number of days on work disability among pwTMJD. The main study finding was that many types of previous CMF trauma were strongly associated with TMJD, with mandibular fractures having the strongest association (adjusted odds ratio 11.4). Furthermore, the strongest association for an increased number of annual days on work disability was found for pwTMJD with a history of CMF trauma. These results suggest that CMF trauma influences the developmental path of TMJD, even in a population-based sample.

Salinas Fredricson et al. 2025.

International Journal of Oral and Maxillofacial Surgery, vol. 54, no. 6.

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Keywords: Arthrocentesis; epidemiology; maxillofacial injuries; registries; return to work; risk factors; sick leave; temporomandibular joint; temporomandibular joint disorders.

Evidence Level: 4B

Link: [https://www.ijoms.com/article/S0901-5027\(24\)00445-4/fulltext](https://www.ijoms.com/article/S0901-5027(24)00445-4/fulltext)

Occupational rhizarthrosis treated surgically: Effects on work performance

Background: Osteoarthritis of the trapeziometacarpal joint (rhizarthrosis) is one of the most frequent causes of hand dysfunction. Its significant impact on daily activities and work tasks is evident. This clinical condition is more commonly associated with older age, predominantly affects females, and is often linked to repetitive movements and heavy manual labour. Therefore, it is crucial to focus on the prevention and early intervention of this pathology to minimize its impact not only on worker's health but also on their professional performance. This article aims to critically examine the association between rhizarthrosis, namely the pain with these conditions and its influence on work capacity. **Methods:** An epidemiological survey was conducted on active workers diagnosed with symptomatic rhizarthrosis who underwent surgical treatment. Data collected included gender, age, dominant hand, labour intensity scale, radiological classification of rhizarthrosis, patient-reported pain classification, and work capacity before and after surgical intervention. **Results:** In this study, there was a higher prevalence among females and older individuals. More advanced radiological classifications of rhizarthrosis did not correlate with more advanced pain classifications; however, statistically significant differences were found in higher work disability. Jobs requiring higher labour intensity and greater hand use were significantly associated with higher pain levels, increased work disability, and elevated radiological classifications of rhizarthrosis according to the Eaton and Littler scale. **Conclusions:** Patients with rhizarthrosis surgically treated showed a statistically significant reduction in reported pain on the analogue scale, as well as greater work capacity after surgical intervention, thus contributing to better professional performance.

Mendes Ribeiro et al. 2025.

La Medicina del Lavoro, vol. 116, no. 3.

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(<https://creativecommons.org/licenses/by-nc/4.0/>)

Keywords: Occupational rhizarthrosis; rhizarthrosis; surgery; treatment.

Evidence Level: 4B

Link: <https://mattioli1885journals.com/index.php/lamedicinadellavoro/article/view/16161>

Adapting to the Future of Work

Technology

Effects of work-related digital technology on occupational health in the public sector: A scoping review

Background: Despite a growing literature on how digitalisation affects service quality, justice, and accountability in the public sector, research on the effects on the work and work environment of public employees is scarce. **Objective:** To present and discuss existing evidence and identify knowledge gaps related to how digitalization affects the work and work environment of public sector employees. **Methods:** This scoping review is based on peer reviewed academic journal articles in English found in PubMed, PsycINFO, Business Source Premier (EBSCO) and Scopus. **Results:** The review included 52 studies, of which most focused on office or care workers. An increase in studies since 2020 indicates growing interest in the topic. Challenges among screen-level bureaucrats included work-life balance problems, technostress and fear of job loss. Among street-level bureaucrats, reported challenges included curtailed discretion, lack of user involvement and ethical stress. Identified knowledge gaps include the small number of studies with a work environment focus in general and on sectors beyond office and health settings in particular, few studies set outside of Europe and absence of studies on recent phenomena such as AI or algorithmic management. **Conclusions:** In view of the presented scarcity of research, we suggest that relevant questions are included in national and local surveys to enable more research, that more studies are conducted in occupational sectors, countries and regions lacking this type of research, and that

comparative research is stimulated to uncover differences between the effects of digitalisation on occupational health in private and public sector work settings.

Håkansta et al. 2025.

WORK: A Journal of Prevention, Assessment & Rehabilitation, vol. 81, no. 2.

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Keywords: Digitalisation; employees; government; occupational health; psychological well-being; social isolation; work-life balance; working conditions.

Evidence Level: 1A

Link: <https://pubmed.ncbi.nlm.nih.gov/40101257/>

Artificial intelligence and the wellbeing of workers

This study explores the relationship between artificial intelligence (AI) and workers' well-being and health using longitudinal survey data from Germany (2000-2020). Using a measure of occupational exposure to AI, we explore an event study design and a difference-in-differences approach to compare AI-exposed and non-exposed workers. Before AI became widely available, there is no evidence of differential pre-trends in workers' well-being and health. We find no evidence of a sizeable negative impact of AI on workers' well-being and mental health. If anything, there is evidence of an improvement in health status and health satisfaction, which may be explained by the decline in job physical intensity. Overall, our results are consistent with the lack of negative effects of AI on the labor markets.

Giuntella et al. 2025.

Scientific Reports, vol. 15, no. 1.

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Keywords: Artificial intelligence; future of work; physical and mental health; well-being.

Evidence Level: 4B

Link: <https://www.nature.com/articles/s41598-025-98241-3>

AI integration and workforce development: Exploring job autonomy and creative self-efficacy in a global context

This paper explores the relationship between Artificial Intelligence (AI) integration in the workplace, cultural orientation, and its impact on job autonomy and creative self-efficacy. Our study employs a mixed-method experimental design across 480 individuals from different cultural backgrounds, specifically individualistic (United Kingdom) and collectivistic (Mexico) cultures. We evaluate how they perceive AI's role in their professional lives. We focus on two key aspects: job autonomy, the level of control and discretion employees have over their tasks, and creative self-efficacy, the confidence in one's ability to generate innovative ideas. Our findings revealed a significant increase in job autonomy following AI integration across all participants. Interestingly, this increase was more pronounced in the individualistic participants. Regarding creative self-efficacy, we found gender-specific impacts, with male participants experiencing a decrease, contrary to our expectations. Finally, our results supported the hypothesis that cultural orientation influences perceptions of AI, with collectivistic participants being more receptive to AI integration. These findings have significant implications for organizations integrating AI in multicultural environments. They highlight the importance of considering cultural differences in AI deployment strategies and suggest a need for culturally sensitive AI systems. The study also opens avenues for future research, particularly in exploring the role of other cultural dimensions, conducting longitudinal studies, and investigating ethical and bias-related aspects of AI in the workplace.

Xavier et al. 2025.

PLoS One, vol. 20, no. 6.

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Keywords: AI; artificial intelligence; workforce development; job autonomy; self-efficacy.

Evidence Level: 4B

Link: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0319556>