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

**Bellou A, Papakonstantinou D, and Papadopoulos K. Workplace social support for people with physical disability. *Journal of Vocational Rehabilitation*. 2024; 61(1):115-126.**  
<https://doi.org/10.3233/JVR-240023>

**Chlon-Dominczak A, Kotowska IE, Magda I, Smyk-Szymanska M, Strzelecki P, and Bolesta K. Labour market gender gaps and childcare policies in countries with different social investment strategies. *Social Policy & Administration*. 2024; 58(4):583-604.**  
<https://doi.org/10.1111/spol.13031>

**Dorstyn D, Oxlad M, Whitburn S, Fedoric B, Roberts R, and Chur-Hansen A. The value of work simulation rehabilitation: a qualitative study. *Journal of Vocational Rehabilitation*. 2024; 60(3):353-361.**  
<https://doi.org/10.3233/JVR-230062>

**Gates TM, Daher M, McRae P, and Simpson GK. Validation of the work-ability support scale in individuals seeking to return to work after severe acquired brain injury. *Disability & Rehabilitation*. 2024; 46(14):3164-3175.**  
<https://doi.org/10.1080/09638288.2023.2243819>

Abstract: Purpose To assess the reliability and validity of the work-ability support scale (WSS) in a severe traumatic/acquired brain injury (TBI/ABI) population seeking to return to work (RTW).  
Materials and methods One hundred forty-four clients were enrolled in a vocational rehabilitation (VR) intervention trial through the Brain Injury Rehabilitation Program in New South Wales, Australia. Each client's primary brain injury clinician and VR provider completed the WSS pre- and post-

intervention. Validating measures assessing dysexecutive behavior, disability, participation, and work instability were completed. Several aspects of reliability and validity were evaluated. Results Internal consistency was excellent for Part A (Cronbach's  $\alpha > 0.9$ ) but unacceptably low to questionable for Part B ( $\alpha < 0.6$ ). Inter-rater reliability between clinicians and VR providers was generally fair to moderate for Part A ( $\kappa < 0.6$ ) and worse for Part B ( $\kappa < 0.5$ ), with both slightly improving at post-intervention. Strong support was found for predictive and convergent validity, but not divergent validity. Confirmatory factor analysis indicated a poor fit for Part A, whereas most Part B fit indices met criteria. Conclusions The WSS can play a useful role in assessing return to work (RTW) potential, planning and evaluation after severe TBI/ABI. Training could improve consistency of administration among staff working across health and VR service sectors.

**Grimmond T, King T, LaMontagne AD, Oostermeijer S, Harrap B, Newberry-Dupe J, et al. Workplace-related determinants of mental health in food and bar workers in Western, high-income countries: a systematic review. *American Journal of Industrial Medicine*. 2024; 67(8):696-711.**

<https://doi.org/10.1002/ajim.23620>

**Abstract:** Background: This review synthesizes evidence from etiologic and intervention studies of workplace-related determinants of mental health in workers in food and bar workers in the hospitality industry in Western high-income countries. Methods: Peer-reviewed literature published between January 2000 and August 2023 was gathered from five bibliographic databases. Any study design was eligible. Study quality was assessed using the Joanna Briggs Institute tools for appraisal. Results: A narrative analysis was conducted for 26 included studies (total  $n = 15,069$  participants) across Australia (3), Ireland (1), Norway (1), Spain (2), the United States (17) and the United Kingdom (2). Individual and task-related factors such as high emotional job demands and low job control were associated with high burnout and depression. Uncivil and hostile interpersonal interactions with customers, management, and colleagues were found to contribute to poor mental health outcomes, including depression, anxiety, and burnout. Conclusion: Findings from included studies highlight the impact of workplace culture, including management practices and workplace social support, on mental health. Organization-level interventions may therefore be most effective for addressing individual, interpersonal, and organizational determinants of mental health in food and bar occupations, particularly when implemented as part of broader organizational efforts to support health and wellbeing. Industry-wide policy changes may also be necessary to address structural concerns, including job and financial insecurity, job strain and access to benefits, such as secure sick leave and minimum contract hours.

**Hidaka T, Kakamu T, Endo S, Masuishi Y, Kasuga H, Hata A, et al. Associations of endurance, muscle strength, and balanced exercise with subjective sleep quality in sedentary workers: a cross-sectional study. *Work*. 2024; 78(3):761-770.**

<https://doi.org/10.3233/WOR-230299>

**Abstract:** Background: The optimal exercise combination for improving sleep quality among sedentary workers is unclear. Objective: To reveal what combination of exercises contributes to good sleep quality. Methods: In this cross-sectional study, we enrolled 5,201 sedentary workers who underwent health examinations in 2019. Data on sleep quality, basic attributes, energy expenditure, and lifestyle aspects such as exercise and physical activity, supper time close to bedtime, and alcohol intake were obtained. The subjects reported their exercise habits by selecting up to three forms of exercise from a

list of 182 options, which were classified into three types: endurance (e.g., jogging), muscle strength (e.g., bench pressing), and balanced types which combined both endurance and muscle strength characteristics. (e.g., walking). These forms were then categorized into eight combination patterns: endurance only; muscle strength only; balanced only; endurance and muscle strength; endurance and balanced; muscle strength and balanced; all types; and absence of any exercise habits. Binary logistic regression analysis was used to examine the associations between the exercise combination patterns and sleep quality. Results: Good sleep quality was significantly associated with "endurance" (OR = 1.419; 95% CI 1.110-1.814), "balanced only" (OR = 1.474; 95% CI 1.248-1.741), and "endurance and balance" (OR = 1.782; 95% CI 1.085-2.926) exercise patterns. No significant associations were found between the combinations that included muscle strength exercises and sleep quality. Conclusion: The endurance or balanced-type exercises, or a combination of both, may help to improve the sleep quality of sedentary workers as part of occupational health management.

**Iversen IB, Vestergaard JM, Ohlander J, Peters S, Bendstrup E, Bonde JPE, et al. Occupational exposure to respirable crystalline silica and incident idiopathic interstitial pneumonias and pulmonary sarcoidosis: a national prospective follow-up study. *Occupational & Environmental Medicine*. 2024; 81(6):279-286.**

<https://doi.org/10.1136/oemed-2023-108964> [open access]

Abstract: Background: Respirable crystalline silica is a well-known cause of silicosis but may also be associated with other types of interstitial lung disease. We examined the associations between occupational exposure to respirable crystalline silica and the risk of idiopathic interstitial pneumonias, pulmonary sarcoidosis and silicosis. Methods: The total Danish working population was followed 1977-2015. Annual individual exposure to respirable crystalline silica was estimated using a quantitative job exposure matrix. Cases were identified in the Danish National Patient Register. We conducted adjusted analyses of exposure-response relations between cumulative silica exposure and other exposure metrics and idiopathic interstitial pneumonias, pulmonary sarcoidosis and silicosis. Results: Mean cumulative exposure was 125  $\mu\text{g}/\text{m}^3\text{-years}$  among exposed workers. We observed increasing incidence rate ratios with increasing cumulative silica exposure for idiopathic interstitial pneumonias, pulmonary sarcoidosis and silicosis. For idiopathic interstitial pneumonias and pulmonary sarcoidosis, trends per 50  $\mu\text{g}/\text{m}^3\text{-years}$  were 1.03 (95% CI 1.02 to 1.03) and 1.06 (95% CI 1.04 to 1.07), respectively. For silicosis, we observed the well-known exposure-response relation with a trend per 50  $\mu\text{g}/\text{m}^3\text{-years}$  of 1.20 (95% CI 1.17 to 1.23). Conclusion: This study suggests that silica inhalation may be related to pulmonary sarcoidosis and idiopathic interstitial pneumonias, though these findings may to some extent be explained by diagnostic misclassification. The observed exposure-response relations for silicosis at lower cumulative exposure levels than previously reported need to be corroborated in analyses that address the limitations of this study.

**Jubault Krasnopevtseva N, Guntzburger Y, Kaminska R, and Thomas C. Building a conceptual framework of organizationally embedded tensions to enhance leadership for safety in high-risk and highly regulated organizations: a complexity leadership perspective. *Safety Science*. 2024; 177:106572.**

<https://doi.org/10.1016/j.ssci.2024.106572> [open access]

Abstract: Despite substantial advancements in ensuring safety, high-risk and highly regulated organizations have not been immune to major life-threatening accidents. Growing evidence indicates

that these accidents are not solely attributable to the limitations of technical barriers, but rather to the complex interactions among technical, human, and organizational factors. While both the literature and regulatory frameworks have acknowledged the role of leadership in addressing this complexity, traditional views of leadership for safety tend to focus on individual abilities to achieve safety objectives, overlooking its processual and organizationally embedded nature needed to deal with complexity. To address this gap, we draw upon Complexity Leadership Theory, which helps to embrace tensions stemming from complexity. Through a qualitative study based on an international and interdisciplinary workshop on leadership for safety in the nuclear sector, we develop a conceptual framework of organizationally embedded and dynamic tensions that leaders must engage with to enhance safety. Our results contribute to leadership for safety by explaining the embeddedness of this complex process and providing a more nuanced analysis of tensions at multiple levels and their interrelations. We also enrich the Complexity Leadership Theory by going beyond portraying different logics, mechanisms, or processes as irreconcilable polar extremes. By delving into dimensions of complexity related to leadership for safety, our framework provides new insights that can inform more nuanced safety policies and regulations in high-risk and highly regulated environments

**Leopold SS, Hensinger RN, Schoenfeld AJ, Swiontkowski M, Rossi MJ, and Templeton KJ. Improving how orthopedic journals report research outcomes based on sex and gender. *Journal of Hand Therapy*. 2024; [epub ahead of print].**

<https://doi.org/10.1016/j.jht.2024.05.005>

**Nagata S, Yamaguchi S, Tanaka K, Kono S, and Tomura T. I do not expect much ikigai from work: a failed link between employment and well-being among adults with serious mental illness. *Journal of Vocational Rehabilitation*. 2024; 61(1):93-102.**

<https://doi.org/10.3233/JVR-240021> [open access]

Abstract: BACKGROUND: Researchers argue that employment positively affects the well-being of people with serious mental illness. However, empirical studies have provided limited support for these hypotheses. OBJECTIVE: This study aimed to investigate perceptions of employment in relation to the meaning and purpose of life, an important aspect of well-being, among people with serious mental illness. METHOD: Qualitative research design was employed. Psychiatric service users with a history of employment (n = 21) were recruited from Japan. Photo-elicitation interviews were conducted, and the interview data were analyzed using thematic analysis. RESULTS: Employment was recognized as a source of life meaning and purpose when it reflected personal values such as mastery and contribution to society. Employment was not recognized as relevant to life's meaning and purpose if it was regarded as an instrumental activity for making a living. Nevertheless, participants generally agreed that employment was indispensable because it was essential for fulfilling their basic needs and overcoming the stigma of mental illness. CONCLUSION: Our results demonstrate diverse attitudes toward employment among people with serious mental illness, which may explain why employment had only a small effect on well-being.

**Peters S, Udem K, Solovieva S, Selander J, Schlunssen V, Oude Hengel KM, et al. Narrative review of occupational exposures and noncommunicable diseases. *Annals of Work Exposures and Health*. 2024; 68(6):562-580.**

<https://doi.org/10.1093/annweh/wxae045> [open access]

Abstract: OBJECTIVE: Within the scope of the Exposome Project for Health and Occupational Research

on applying the exposome concept to working life health, we aimed to provide a broad overview of the status of knowledge on occupational exposures and associated health effects across multiple noncommunicable diseases (NCDs) to help inform research priorities. **METHODS:** We conducted a narrative review of occupational risk factors that can be considered to have "consistent evidence for an association," or where there is "limited/inadequate evidence for an association" for 6 NCD groups: nonmalignant respiratory diseases; neurodegenerative diseases; cardiovascular/metabolic diseases; mental disorders; musculoskeletal diseases; and cancer. The assessment was done in expert sessions, primarily based on systematic reviews, supplemented with narrative reviews, reports, and original studies. Subsequently, knowledge gaps were identified, e.g. based on missing information on exposure-response relationships, gender differences, critical time-windows, interactions, and inadequate study quality. **RESULTS:** We identified over 200 occupational exposures with consistent or limited/inadequate evidence for associations with one or more of 60+ NCDs. Various exposures were identified as possible risk factors for multiple outcomes. Examples are diesel engine exhaust and cadmium, with consistent evidence for lung cancer, but limited/inadequate evidence for other cancer sites, respiratory, neurodegenerative, and cardiovascular diseases. Other examples are physically heavy work, shift work, and decision latitude/job control. For associations with limited/inadequate evidence, new studies are needed to confirm the association. For risk factors with consistent evidence, improvements in study design, exposure assessment, and case definition could lead to a better understanding of the association and help inform health-based threshold levels. **CONCLUSIONS:** By providing an overview of knowledge gaps in the associations between occupational exposures and their health effects, our narrative review will help setting priorities in occupational health research. Future epidemiological studies should prioritize to include large sample sizes, assess exposures prior to disease onset, and quantify exposures. Potential sources of biases and confounding need to be identified and accounted for in both original studies and systematic reviews

**Ruzycki S, Adisesh A, Burstyn I, Durand-Moreau Q, Labreche F, Zadunayski T, et al. Availability, use, and impact of workplace mental health supports during the COVID-19 pandemic in a Canadian cohort of healthcare workers. Archives of Environmental & Occupational Health. 2024; 79(2):57-66. <https://doi.org/10.1080/19338244.2024.2350956>**

**Abstract:** We investigated the availability and use of workplace mental health (MH) supports during the COVID-19 pandemic in a Canadian cohort of healthcare workers (HCW) and measured anxiety and depression by the Hospital Anxiety and Depression Scale (HADS) completed at four contacts 2020-2022. Reports were available for 4400 HCW working with patients. Half the HCWs had a clinically significant HADS score at one or more contacts Access to MH supports increased during the pandemic, with 94% reporting access to some workplace support by 2022: 47% had made use of at least one support. 25% of those with high HADS scores used no support. Older women and men with depressive conditions were less likely to report use. Reported use of an Employee Assistance Program was associated with a reduction in HADS scores in the following months

**Shiratsuchi D, Motohiro A, Okuyama K, and Abe T. Relationship between occupational stress and presenteeism status among workers in small and medium-sized enterprises. Archives of Environmental & Occupational Health. 2024; 79(2):83-90. <https://doi.org/10.1080/19338244.2024.2359409>**

**Abstract:** This study aimed to identify characteristics of workers experiencing health problems without

a decline in labor productivity to address presenteeism. A cross-sectional analysis was conducted on 554 workers in Japan, with a median age of 43 years. Participants reported any health problems in the past month, along with job stressors, stress responses, social support, and job and life satisfaction using the Brief Job Stress Questionnaire. They were categorized into three groups: "no symptoms," "pre-presenteeism" (health problems without work impact), and "presenteeism" (health problems with work impact). Results showed that 30.1% were in "prepresenteeism" and 52.0% in "presenteeism." Stress responses and social support were linked to both "pre-presenteeism" and "presenteeism," while job stressors and job and life satisfaction were only associated with "presenteeism." These findings offer insights for preventing presenteeism

**van de Wijdeven B, Visser B, and Kuijer PPFM. Evaluating the categorisation of interventions in individual working practice aimed at preventing work-related musculoskeletal disorders: an international experts consultation. *Applied Ergonomics*. 2024; 120:104338.**

<https://doi.org/10.1016/j.apergo.2024.104338> [open access]

Abstract: In a previous scoping review, eight categories of interventions in individual work practice were defined. The aim of the present study is to evaluate the relevance and completeness of these eight categories and to increase the clarity of the nomenclature and definitions of each category. An international expert consultation has been carried out for this purpose. Thirty-eight experts from 13 countries participated. Data collection was conducted using a survey design comprising structured questions. Consensus was reached if 75% of the experts answered 'Strongly agree' or 'Agree' on a 5-point Likert scale. For the topic 'Relevance', there was consensus for six of the eight categories (range 78%-86%), the exceptions were the categories: 'Exercising' (72%) and 'Professional manners' (64%). With regard to the topic 'Nomenclature', consensus was reached for six categories and for the topic 'Definition' this was five categories. The present definitions have been improved based on the expert recommendations. With respect to the topic 'Completeness': although a limited number of suggestions were given, this did not lead to one or more categories being added to the existing eight categories. The final 'Nomenclature' for the categories is: 'Variation', 'Professional behaviour', 'Motoric skills', 'Vocational working techniques', 'Physical workplace', 'Physical training', 'Assistive devices and tools' and 'Task content and task organisation'. This expert consultation has provided a solid basis for endorsing the categorisation of interventions in IWP and is an important step in building a framework to develop and evaluate interventions in IWP

**Yelin E, Trupin L, Iley T, Rhee N, Lafrance A, and Varghese M, I. The impact of alternative arrangements, contingent jobs, and work secured through an app on the well-being of working age adults: results from the California Work and Health Survey. *American Journal of Industrial Medicine*. 2024; 67(8):753-763.**

<https://doi.org/10.1002/ajim.23625>

Abstract: BACKGROUND: There is recognition of the growing prevalence of alternative work arrangements, contingent jobs, and work secured through an app. However, there have been few systematic efforts to understand the impact of these forms of work on individuals and households. METHODS: The data derive from the California Work and Health Survey administered to a sample of the working age population of the state solicited through random-digit dialing of cell phone numbers. 4014 individuals completed the survey, 26% of those with an in-service cell phone number. We present odds ratios and 95% confidence intervals from logistic regression estimating the impact of

being an independent contractor, in other forms of alternative work arrangements, in contingent jobs, and in work secured through an app, on economic and health status and working conditions in main jobs, with and without adjustment for covariates. RESULTS: Several of the forms of work analyzed are associated with lower earnings and higher rates of wage theft, household poverty, benefit reciprocity, and expectation of hardships in food, housing, and medical care in the immediate future. Association between the forms of work and current health status is less consistent. However, several forms of work are associated with working conditions known to be risk factors for subsequent health problems. CONCLUSIONS: Public policy to mitigate the adverse impacts of work, largely developed in the 20th Century when there was an identified workplace, may be insufficient to protect workers' well-being for alternative work arrangements, contingent jobs, and work secured through an app

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