

**ABOUT RESEARCH ALERT**

*Research Alert* is a service provided to you by the Institute for Work & Health (IWH) to help you keep abreast of recent literature in the areas of occupational health and safety, epidemiology, public health and others within the IWH mandate. Please note that these articles have not been reviewed by Institute scientists to assess the quality of the studies. Research Alerts should not be considered an endorsement of the findings. Readers are cautioned not to act on the results of single studies, but rather to seek bodies of evidence. It should also be noted that the Institute for Work & Health cannot provide full-text of articles listed in Research Alerts to individuals outside of the organization, as this violates copyright legislation.

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

**\*Fisher SL, Bonaccio S, Jetha A, Winkler M, Birch GE, and Gignac MAM. Guidelines for conducting partnered research in applied psychology: an illustration from disability research in employment contexts. *Applied Psychology*. 2022; [epub ahead of print]. <https://doi.org/10.1111/apps.12438> [open access]**

Abstract: The partnered research method, used routinely in other fields, offers great potential to improve the quality and practical use of applied psychology research. Partnered research integrates the perspectives of researchers, knowledge users, people who have lived experience with the attributes being studied, and other stakeholders in all elements of the research process, from the creation and generation of research questions to the methods used, the data analyzed, and the dissemination, application, and implementation of research results. We explain the concept of partnered research and provide a step-by-step roadmap for applied psychology scholars interested in conducting partnered research. In doing so, we also address common challenges with this method and provide advice on how to overcome them. We embed our description of the partnered research approach primarily in the context of research on disabilities and work but also offer examples drawn from other areas of applied psychology.

**\*Tayer-Shifman OE, Yuen K, Green R, Kakvan M, Katz P, Bingham KS, Diaz-Martinez JP, Ruttan L, Wither JE, Tartaglia MC, Su J, Bonilla D, Choi MY, Appenzeller S, Barraclough M, Beaton DE, Touma Z. Assessing the utility of the Montreal Cognitive Assessment in screening for cognitive impairment in patients with systemic lupus erythematosus. *Arthritis***

**Care & Research. 2022; [epub ahead of print].**

<https://doi.org/10.1002/acr.24971>

**Abstract:** Objective: Screening for cognitive impairment (CI) in systemic lupus erythematosus (SLE) relies on the American College of Rheumatology (ACR) neuropsychological battery (NB). By studying the concurrent criterion validity, our goal was to assess the Montreal Cognitive Assessment (MoCA) as a screening tool for CI compared to the ACR-NB and to evaluate the added value of the MoCA to the Automated Neuropsychological Assessment Metrics (ANAM). Methods: A total of 285 adult SLE patients were administered the ACR-NB, MoCA, and ANAM. For the ACR-NB, patients were classified as having CI if there was a Z score of  $\leq -1.5$  in  $\geq 2$  domains. The area under the curve (AUC) and sensitivities/specificities were determined. A discriminant function analysis was applied to assess the ability of the MoCA to differentiate between CI, undetermined CI, and non-CI patients. Results: CI was not accurately identified by the MoCA compared to the ACR-NB (AUC of 0.66). Sensitivity and specificity were poor at 50% and 69%, respectively, for the cutoff of 26, and 80% and 45%, respectively, for the cutoff of 28. The MoCA had a low ability to identify CI status. The addition of the MoCA to the ANAM led to improvement on the AUC by only 2.5%. Conclusion: The MoCA does not have adequate concurrent criterion validity to accurately identify CI in patients with SLE. The low specificity of the MoCA may lead to overdiagnosis and concern among patients. Adding the MoCA to the ANAM does not substantially improve the accuracy of the ANAM. These results do not support using the MoCA as a screening tool for CI in patients with SLE.

**Bhagwat K and Delhi VSK. Investigation of multi-level safety culture in the Indian construction industry: a multi-level employees' perception-based approach. International Journal of Occupational Safety and Ergonomics. 2022; 28(4):2052-2065.**

<https://doi.org/10.1080/10803548.2021.1956184>

**Abstract:** Inadequate compliance with safety practices is a major hurdle in the construction industry, and a single-level source of input to assess safety culture is a major limitation of the literature. Therefore, this study aimed to capture multi-level employees' (top management, middle management and workers) perceptions to assess multi-level safety culture (organizational level, project level and personnel level) in the construction industry. This study considered the Indian construction industry as the study area and used a questionnaire survey and interview technique as research instruments. In total, 184 responses were collected from multi-level employees. Data analysis was performed using a descriptive statistical method and hypothesis testing using the Mann-Whitney U test followed by the Kruskal-Wallis and post hoc tests. Findings highlighted inadequate safety compliances and significant ( $p < 0.05$ ) perception differences among multi-level employees. Further, root cause analysis for observed perception differences was performed, and managerial implications were discussed from implementation perspectives.

**Duong HP, Garcia A, Hilfiker R, Leger B, and Luthi F. Systematic review of biopsychosocial prognostic factors for return to work after acute orthopedic trauma: a 2020 update.**

**Frontiers in Rehabilitation Sciences. 2022; 2:791351.**

<https://doi.org/10.3389/fresc.2021.791351> [open access]

**Abstract:** Objective: To provide updated evidence on prognostic factors for return to work (RTW) in the early and late phases after acute orthopedic trauma from a biopsychosocial perspective. Methods: A systematic review of articles indexed in the MEDLINE, CINAHL, and Embase databases between 2010 and 2020 was performed. The inclusion criteria were cohort studies of employed populations sustaining acute orthopedic trauma with follow-up data on RTW. Biopsychosocial prognostic factors for RTW must be reported in the multiple regression models and divided into early (= 6 months) and late phases (> 6 months) postinjury. Two reviewers performed study selection, assessed the risk of bias and quality using the Quality in Prognosis Studies (QUIPS) tool and the Newcastle-Ottawa Scale (NOS), and extracted data independently. Results: Thirty articles were included with a follow-up period of 1-58 months. Based on the QUIPS tool, 7 studies (23%) were considered to have a low risk of bias, and 21 studies (70%) were considered to have a moderate risk of bias. Based on the NOS, the quality was high in 87% of the included studies. The RTW rates ranged from 22% to 74% in the early phase and from 44% to 94% in the late phase. In the early phase, strong evidence was found for injury severity. In the late phase, strong evidence was found for age, injury severity, level of pain, self-efficacy, educational level, blue-collar work, and compensation status; moderate evidence was found for recovery expectations and physical workload. There was limited or inconsistent evidence for the other factors. Conclusion: Based on the levels of evidence, injury severity should be considered as one of the key barriers to RTW in the early and late phases postinjury. This finding underlines the need for serious injury prevention efforts. Our results also emphasize the multifaceted actions of the biopsychosocial model to facilitate RTW: promoting policies for older injured workers, improving access to medical and rehabilitation facilities, and adapting physical workload. Multiple other factors are likely important but require additional high-quality studies to assess their role in the RTW process.

**Gardner DM and Prasad JJ. The consequences of being myself: understanding authenticity and psychological safety for LGB employees. Journal of Occupational and Organizational Psychology. 2022; 95(4):788-797.**

<https://doi.org/10.1111/joop.12399> [open access]

**Abstract:** Although workplace authenticity has gained interest by researchers and the popular press, the construct's conceptualization as enacting only positive effects as informed by self-verification theory may not represent the experiences of workers of marginalized identities. Acknowledging that individuals deciding to disclose a stigmatized identity at work face potential prejudice, we investigated whether the benefits of authentic expression on employees' organizational commitment and job involvement depend on psychological safety. Via a time-lagged survey of sexual-minority employees, we found evidence for a model

explicating the conditional indirect effects of identity disclosure and authenticity on outcomes, as moderated by perceived workgroup psychological safety. Such findings theoretically challenge the literature's present assumption of authenticity's uniform benefits via exploration of important contextual boundary conditions. Practically, this research underscores the need for psychologically safe work environments, encouraging employers to maximize psychological safety where possible to see the full benefit of employees' workplace authenticity.

**Jimenez-Merida R, Romero-Saldana M, de-Pedro-Jimenez D, Alcaide-Leyva JM, Canton-Habas V, Alvarez-Fernandez C, et al. Lifestyle, type of work, and temporary disability: an incidence study of the working population. *International Journal of Environmental Research and Public Health*. 2022; 19(22):14932.**

<https://doi.org/10.3390/ijerph192214932> [open access]

**Abstract:** The objective of the study was to identify lifestyles associated with loss of health among workers. A retrospective longitudinal incidence study was carried out over a three-year period (2015, 2016, and 2017) among the working population. A total of 240 workers were analysed using information from occupational health assessments. The outcome variable was loss of health due to common illness or workplace injury, quantified by the number of days each episode lasted. Predictor variables were age, gender, type of work, tobacco use, alcohol consumption, physical activity (IPAQ), and adherence to the Mediterranean diet (AMD). An adjusted multiple linear regression was performed, determining the goodness of fit of the final model using the coefficient of determination adjusted  $r^2$ . During the study, 104 men (58.8%) and 25 women (39.7%) suffered an episode of illness or workplace injury ( $p < 0.05$ ). The overall incidence was 17.9% people/year 95% CI [15, 21.3]. 4.6% of the workers were sedentary or engaged in light physical activity, and 59.2% maintained an adequate AMD. Workers who engaged in high levels of physical activity had an average of 36.3 days of temporary disability compared to 64.4 days for workers with low-moderate levels of physical activity ( $p < 0.01$ ).

**La Torre G, Leggieri PF, Cocchiara RA, Dorelli B, Mannocci A, Sernia S, et al. Mindfulness as a tool for reducing stress in healthcare professionals: an umbrella review. *Work*. 2022; 73(3):819-829.**

<https://doi.org/10.3233/WOR-210504>

**Abstract:** BACKGROUND: Health care providers (HCPs) and health care students experience a huge amount of stress due to high workloads and pressure to perform and are likely to develop anxiety, depression and burnout. OBJECTIVE: The objective was to carry out an umbrella review of systematic and narrative reviews on the effectiveness of mindfulness-based interventions in reducing stress and improving well-being in HCPs and health care students. METHODS: Systematic and narrative reviews that examined the impact of mindfulness-based interventions on HCPs and healthcare students' perceived stress were identified through a systematic search of three electronic databases: PubMed, Scopus and

Web of Science. RESULTS: Fifteen articles were included in the analysis: eleven systematic and four narrative reviews. Studies' quality varied from critically low to high. The different interventions showed positive results in reducing stress in both HCPs and students, with mindfulness-based stress reduction (MBSR) course having the major impact. CONCLUSIONS: MBSR techniques and other mindfulness based interventions resulted to be potentially effective in reducing stress. However, despite the vast amount of data collected by the studies and the promising results, several limitations affected the validity of the studies. Therefore, more research that considers the critical aspects of this field is required, in order to provide more reliable results

**Lecours A, Laliberte M, Lord MM, Leonard G, and Ruel J. The process of rehabilitation, return and stay at work of aging workers who suffered an occupational injury: a portrait based on the experience of Canadian stakeholders. Journal of Occupational Rehabilitation. 2022; 32(4):790-802.**

<https://doi.org/10.1007/s10926-022-10045-8>

Abstract: PURPOSE: This study aims to paint a picture of the factors that influence the process of rehabilitation, return, and stay at work, for aging workers who have suffered an occupational injury. METHODS: Based on a descriptive interpretative research design, the authors conducted interviews with 23 participants (i.e., aging workers, workers' representatives, employers, insurers, and rehabilitation professionals) to gather their perspectives. Qualitative data was analyzed through thematic analysis. RESULTS: Fifteen factors related to the worker, health system, workplace, or compensation system were identified. These factors prevail during rehabilitation, return to work, stay at work, or the entire process. CONCLUSIONS: This study contributes to the advancement of knowledge regarding three main ideas: (1) the importance of not placing the responsibility on the worker in this complex process, (2) the key role of the compensation system, and (3) the necessity of transforming work to reduce ageism

**Levay P, Heath A, and Tuvey D. Efficient searching for NICE public health guidelines: would using fewer sources still find the evidence? Research Synthesis Methods. 2022; 13(6):760-789.**

<https://doi.org/10.1002/jrsm.1577>

Abstract: Systematic searches are integral to identifying the evidence that is used in National Institute for Health and Care Excellence (NICE) public health guidelines (PHGs). This study analyses the sources, including bibliographic databases and other techniques, required for PHGs. The aims were to analyse the sources used to identify the publications included in NICE PHGs; and to assess whether fewer sources could have been searched to retrieve these publications. Data showing how the included publications had been identified was collated using search summary tables. Three scenarios were created to test various combinations of sources to determine whether fewer sources could have been used. The sample included 29 evidence reviews, compiled using 13 searches, to support 10 PHG topics. Across the PHGs, 23

databases and six other techniques retrieved included publications. A mean reduction in total results of 6.5% could have been made if the minimum set of sources plus Cochrane Library, Embase, and MEDLINE were searched. On average, Cochrane Library, Embase, and MEDLINE contributed 76.8% of the included publications, with other databases adding 11% and other techniques 12.2%. None of the searches had a minimum set that was comprised entirely of databases. There was not a core set of sources for PHGs. A range of databases and techniques, covering a multi-disciplinary evidence base, was required to identify all included publications. It would be possible to reduce the number of sources searched and make some gains in productivity. It is important to create a tailored set of sources to do an efficient search

**Li X, Cesta A, Movahedi M, and Bombardier C. Late-onset rheumatoid arthritis has a similar time to remission as younger-onset rheumatoid arthritis: results from the Ontario Best Practices Research Initiative. *Arthritis Research & Therapy*. 2022; 24(1):255.**

<https://doi.org/10.1186/s13075-022-02952-1> [open access]

**Abstract:** Background: The prevalence of rheumatoid arthritis (RA) in persons 60 years or older is estimated to be 2%. Late-onset rheumatoid arthritis (LORA) is traditionally defined as the onset of RA after the age of 60 years. Compared to younger-onset rheumatoid arthritis (YORA) which occurs before the age of 60 years, LORA has unique characteristics and disease manifestations. To date, few reports have addressed LORA and the prognosis of LORA patients remains unclear. We compared the clinical characteristics, time to remission and treatment regimen at remission between LORA and YORA patients. Methods: This prospective cohort study used a registry database in Ontario, Canada from 2008 to 2020. Patients were included if they had active rheumatoid arthritis (RA) disease (=1 swollen joint) and were enrolled within 1 year of diagnosis. LORA was defined as a diagnosis of RA in persons 60 years and older and YORA as a diagnosis of RA in persons under the age of 60. Remission was defined by Disease Activity Score 28 (DAS28) =2.6. A multivariable Cox proportional hazards model was used to estimate time to remission. Results: The study included 354 LORA patients and 518 YORA patients. The mean (standard deviation) baseline DAS28 score was 5.0 (1.3) and 4.8 (1.2) in LORA and YORA patients, respectively ( $p=0.0946$ ). Compared to YORA patients, the hazard ratio for remission in LORA patients was 1.10 (95% confidence interval 0.90 to 1.34  $p=0.36$ ) after adjusting for other prognostic factors. For patients who reached remission, LORA patients were less likely to be on a biologic or Janus kinase (JAK) inhibitor (16% vs. 27%) and more likely to be on a single conventional synthetic disease-modifying anti-rheumatic drugs (csDMARD) (34% vs. 27%) than YORA patients ( $p=0.0039$ ). Conclusion: LORA and YORA patients had similar prognosis in terms of time to remission. At remission, LORA patients were more likely to be on a single csDMARD without a biologic or JAK inhibitor.



**MacEachen E, De Rijk A, Dyreborg J, Fassier JB, Fletcher M, Hopwood P, et al. Laws, policies, and collective agreements protecting low-wage and digital platform workers during the covid-19 pandemic. *New Solutions*. 2022; 32(3):201-212.**

<https://doi.org/10.1177/10482911221133796> [open access]

Abstract: In the context of the COVID-19 pandemic, this commentary describes and compares shifting employment and occupational health social protections of low-wage workers, including self-employed digital platform workers. Through a focus on eight advanced economy countries, this paper identifies how employment misclassification and definitions of employees were handled in law and policy. Debates about minimum wage and occupational health and safety standards as they relate to worker well-being are considered. Finally, we discuss promising changes introduced during the COVID-19 pandemic that protect the health of low-wage and self-employed workers. Overall, we describe an ongoing "haves" and a "have not" divide, with on the one extreme, traditional job arrangements with good work-and-health social protections and, on the other extreme, low-wage and self-employed digital platform workers who are mostly left out of schemes. However, during the pandemic small and often temporary gains occurred and are discussed

**Mailan Arachchige Don RK and Hong SC. Sri Lankan migrant worker perceptions of workplace hazard and safety awareness: case of the manufacturing industry in Korea. *International Journal of Occupational Safety and Ergonomics*. 2022; 28(4):2355-2361.**

<https://doi.org/10.1080/10803548.2021.1992158>

Abstract: This study was carried out to understand the perspective of unskilled Sri Lankan employees in the manufacturing industry to gain a deeper understanding to learn how to utilize expatriate labor meaningfully in a host country workplace. The structural questionnaire was developed according to previous studies and international labor standards and was validated with an expert in the field. The questionnaire included three parts covering the basic information, perception of workplace hazards, and health and safety awareness of workers. Unfamiliar work practices and processes due to lack of safety and work training have become an impediment. Further investigation of this study shows that language is one of the main barriers to living and working in Korea, the findings of this study indicate where employment permit system (EPS) workers appear to be fervent and our research exhibits the unrevealed image of EPS workers in the Republic of Korea

**Nozawa K, Matsuyama S, Higa S, Yamamoto Y, and Asami Y. Physician consultation rates and characteristics among workers with chronic pain or headache who participated in a behavioural change program: a retrospective database analysis using real-world healthcare data. *BMJ Open*. 2022; 12(11):e056846.**

<https://doi.org/10.1136/bmjopen-2021-056846> [open access]

Abstract: Objective: To assess the potential benefit of a behavioural change programme in working individuals with chronic pain or headache, in the form of increased physician consultation. Design: Retrospective observational database study. Setting: Members of

employment-based healthcare insurance in Japan. Participants: Individual-level data of working individuals aged <75 years from November 2019 through March 2020 were extracted from a database managed by MinaCare Co., Ltd. Included individuals had records of programme participation and chronic pain or headache (self-reported), and did not consult physicians for  $\geq 3$  months before programme participation. Outcome measures: Physician consultation rates after participating in the programme were examined from December 2019 through March 2020, separately for chronic pain and headache. Baseline characteristics included age, pain numeric rating scale (NRS) score (for chronic pain), suspected migraine (for headache), labour productivity including absenteeism and presenteeism, and 4-month indirect costs in Japanese yen (JPY). Results: The baseline mean age ( $\pm$ SD) of 506 individuals with chronic pain was  $46.8 \pm 10.1$  years; that of 352 individuals with headache was  $43.6 \pm 9.9$  years. Of those with chronic pain, 71.4% had an NRS score  $\geq 4$ , and 49.7% of those with headache had suspected migraine. Overall, 11.3% and 5.4% of those with chronic pain or headache consulted physicians, respectively. The mean baseline absenteeism and presenteeism were 1.5% and 19.1% in those with chronic pain, and 1.5% and 23.0% in those with headache. The baseline indirect costs were 586 941.6 JPY and 1 060 281.6 JPY among those with chronic pain or headache, respectively. Conclusion: Given that the individuals did not regularly consult physicians before the programme despite reporting substantial symptoms, our results suggest the potential benefit of educational programmes encouraging physician consultation. Further studies are required to evaluate how to effectively implement such educational programmes via healthcare insurers to reduce the burden of pain symptoms and overall medical costs.

**OECD. Promoting health and well-being at work: policy and practices, OECD health policy studies. Paris: OECD Publishing; 2022.**

<https://www.oecd.org/publications/promoting-health-and-well-being-at-work-e179b2a5-en.htm>

**Ravinskaya M, Verbeek JH, Langendam MW, Madan I, Verstappen SMM, Kunz R, et al. Preferred methods of measuring work participation: an international survey among trialists and Cochrane systematic reviewers. Journal of Occupational Rehabilitation. 2022; 32(4):620-628.**

<https://doi.org/10.1007/s10926-022-10031-0> [open access]

**Abstract:** Purpose Heterogeneity in work participation (WP) outcomes measurements hampers large scale evidence synthesis in systematic reviews of trials. In this survey we explore authors' reasons for choosing specific WP outcomes and their measurement methods, including employment status, absence from work, at-work productivity loss, and employability. Methods We contacted authors of 260 trials and 69 systematic reviews and asked closed and open-ended questions about previously used WP outcomes and measurement methods as well as their opinion on the best way to measure WP. Results In total, 91 authors from a wide range of professional backgrounds completed the survey. The



majority of authors (86%) chose WP outcomes based on their use in previous similar studies. In most studies (88%), patients had not been involved in the process of selecting the WP outcome. Authors judged feasibility to be an important factor for choosing a measurement instrument (67%). Additionally, valid measurement tools should be available, easy to administer and not too time consuming. Although authors preferred registry data for long term follow-up, the availability and validity of registries was seen as a barrier. Most of the reviewers (72%) struggled to pool data because of variation in follow-up times and cut off points and varying definitions of work outcomes. Almost all (92%) respondents support the use of a Core Outcome Set for Work. Conclusions There is strong support from authors of trials and systematic reviews to develop a core outcome set on work participation outcomes for the evaluation of interventions

**Rayens NT, Rayens EA, and Tighe RM. Co-occurrence of pneumoconiosis with COPD, pneumonia and lung cancer. Occupational Medicine. 2022; 72(8):527-533.**

<https://doi.org/10.1093/occmed/kqac079>

Abstract: BACKGROUND: Pneumoconiosis is a well-documented occupational disease that is linked to conditions such as chronic obstructive pulmonary disease (COPD), pneumonia and congestive heart failure. Pneumoconiosis prevalence has decreased in the United States, but it remains implicated in tens of thousands of deaths worldwide per year. AIMS: To provide a recent update on associations of pneumoconiosis and smoking status with various pulmonary diseases in the United States. METHODS: The CDC's National Vital Statistics System was analysed on the entity axis using ICD-10 codes for pulmonary disease and potential lung injury with a cohort of those aged 15 and older during the years 2010-2019. The cases of evaluated diseases were scaled to rates per 100 000 and compared through analysis of variance. RESULTS: Pneumoconiosis and smoking history were each associated with an increased rate of COPD, but combined, were associated with an even higher rate of COPD than either factor alone. Smoking history was associated with an increased rate of lung cancer, but pneumoconiosis status was only linked to increased lung cancer prevalence in non-smokers. Both pneumoconiosis and smoking were associated with an increased rate of pneumonia, but combined, had no deviation from the pneumonia rate in those with pneumoconiosis alone. Finally, pneumoconiosis status was associated with decreased rates of non-lung cancers and sepsis. CONCLUSIONS: Although pneumoconiosis has become less common in the United States through regulatory and industrial shifts, it is still a significant risk factor for co-occurring pulmonary diseases and will likely remain relevant as international demands for mining, construction and manufacturing change

**Schonenberger CM, Griessbach A, Taji Heravi A, Gryaznov D, Gloy VL, Lohner S, et al. A meta-research study of randomized controlled trials found infrequent and delayed availability of protocols. Journal of Clinical Epidemiology. 2022; 149:45-52.**

<https://doi.org/10.1016/j.jclinepi.2022.05.014> [open access]

Abstract: OBJECTIVES: Availability of randomized controlled trial (RCT) protocols is essential

for the interpretation of trial results and research transparency. **STUDY DESIGN AND SETTING:** In this study, we determined the availability of RCT protocols approved in Switzerland, Canada, Germany, and the United Kingdom in 2012. For these RCTs, we searched PubMed, Google Scholar, Scopus, and trial registries for publicly available protocols and corresponding full-text publications of results. We determined the proportion of RCTs with (1) publicly available protocols, (2) publications citing the protocol, and (3) registries providing a link to the protocol. A multivariable logistic regression model explored factors associated with protocol availability. **RESULTS:** Three hundred twenty-six RCTs were included, of which 118 (36.2%) made their protocol publicly available; 56 (47.6% 56 of 118) provided as a peer-reviewed publication and 48 (40.7%, 48 of 118) provided as supplementary material. A total of 90.9% (100 of 110) of the protocols were cited in the main publication, and 55.9% (66 of 118) were linked in the clinical trial registry. Larger sample size ( $>500$ ; odds ratio [OR] = 5.90, 95% confidence interval [CI], 2.75-13.31) and investigator sponsorship (OR = 1.99, 95% CI, 1.11-3.59) were associated with increased protocol availability. Most protocols were made available shortly before the publication of the main results. **CONCLUSION:** RCT protocols should be made available at an early stage of the trial

**Silva OFD, da Silva JMN, Silva LKD, Lima TDFM, Bornia AC, Souza LAH, et al. Do men and women have different musculoskeletal symptoms at the same musculoskeletal discomfort level? *Ergonomics*. 2022; 65(11):1486-1508.**

<https://doi.org/10.1080/00140139.2022.2088854>

**Abstract:** Owing to biological and social factors, illness-related musculoskeletal symptoms tend to vary between men and women. However, in the past, conceptualised discomfort metrics were applied uniformly to both genders. This study aimed to develop a scale to measure musculoskeletal discomfort that compares the symptoms between men and women. The scale aimed to determine the gender-based response patterns related to symptoms. A total of 707 men and 1302 women reported their symptoms on a body map. Factor analysis and item response theory were used to differentiate the identified symptoms in the construction of a musculoskeletal discomfort scale. Differences in work exposure appeared to explain the symptom patterns between men and women. The scale had eight levels, and it was found that at the same level of discomfort, men and women reported symptoms in different body regions. **Practitioner summary:** On this discomfort scale, the response patterns of men and women were categorised into eight levels. Symptoms differed by gender at the same musculoskeletal discomfort level. This is in contrast to previous studies in which scales were devised without considering differences between the genders. **Abbreviations:** WMSDs: work-related musculoskeletal disorders; BMI: body mass index; FA: factor analysis; IRT: item response theory; KMO: Kaiser-Meyer-Olkin; BST: Bartlett's test of sphericity; F: factor loading;  $h^2$ : communality;  $\alpha$ : Cronbach's alpha;  $\omega$ : McDonald's omega; ai: parameters of discrimination of the items; bik: parameters of difficulty of response categories;  $\theta_j$ : latent trait; RMSEA: root mean square error of approximation; CFI:

comparative fit index; TLI: Tucker-Lewis index; odu: musculoskeletal discomfort units; RA: rarely; OF: often; AL: always..

**Thimbriel R, Urkmez B, Lee B, and Umucu E. COVID-19 stress, resilience, and job loss concerns in people with chronic conditions and disabilities. *Journal of Vocational Rehabilitation*. 2022; 57(3):207-213.**

<https://doi.org/10.3233/JVR-221211>

**Wolvetang S, van Dongen JM, Spekle E, Coenen P, and Schaafsma F. Sick leave due to stress, what are the costs for Dutch employers? *Journal of Occupational Rehabilitation*. 2022; 32(4):764-772.**

<https://doi.org/10.1007/s10926-022-10042-x> [open access]

**Abstract:** Purpose Stress-related illnesses are prevalent in Western society, causing sick leave and putting a heavy economic burden on employers and society. For Dutch employers it is particularly relevant to have insight into the costs of absenteeism due to stress-related illness, as they are legally obligated to continue payment of wages. Therefore, this study assessed the duration and costs of an episode of sick leave due to stress-related illness for Dutch employers. Methods Data on sick leave due to various stress-related illnesses were obtained from a nationwide occupational health service database. Stress-related illnesses included tension complaints, burn-out, overexertion, and other reactions to stress. The duration per sick leave episode was estimated in working days, after which the average cost per sick leave period was estimated using age- and gender-specific price weights. Results During the study period, 16,676 employees took 17,338 episodes of sick leave due to stress-related illness. On average, one episode of sick leave lasted 101 working days, for which the costs for the employer were on average €19,151 per worker. Women were responsible for most episodes of sick leave and were on average 37 days more absent per episode compared to men. Moreover, of all kinds of stress-related illnesses, burn-out had the longest duration of sick leave with 313 calendar days and 163 working days, resulting in an average cost of €30,770. Conclusions Sick leave due to stress-related illness places a heavy burden on employers and thus society. Further research should be conducted on how to reduce this burden.

**Missed an issue?** Catch up on previous Research Alerts available on the IWH website  
[www.iwh.on.ca/journal-articles/research-alerts](http://www.iwh.on.ca/journal-articles/research-alerts)