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

***Hammond A, Tennant A, Ching A, Parker J, Prior Y, Gignac MAM, et al. Psychometric testing of the British English Workplace Activity Limitations Scale in four rheumatic and musculoskeletal conditions. *Rheumatology Advances in Practice*. 2023; 7(1):rkad028. <https://doi.org/10.1093/rap/rkad028> [open access]**

Abstract: Objectives: The aims were to validate a British English version of the Workplace Activity Limitations Scale (WALS) linguistically, then test this psychometrically in RA, axial spondyloarthritis (axSpA), OA and FM. Methods: The WALS was forward translated, reviewed by an expert panel, and cognitive debriefing interviews were conducted. Participants completed a postal questionnaire booklet. Construct (structural) validity was examined by fit to the Rasch measurement model. Concurrent validity included testing between the WALS and the Work Limitations Questionnaire-25 (WLQ-25). Two weeks later, participants were mailed a second questionnaire booklet for test-retest reliability. Results: Minor wording changes were made to the WALS, then 831 employed participants completed questionnaires: 267 men and 564 women; 53.5 (s.d. 8.9) years of age; with condition duration 7.7 (s.d. 8.0) years. The WALS satisfied Rasch model requirements, and a WALS Rasch transformation table was created. Concurrent validity was strong with the WLQ-25 (RA $r_s = 0.78$; axSpA $r_s = 0.83$; OA $r_s = 0.63$; FM $r_s = 0.64$). Internal consistency was consistent with group use ($\alpha = 0.80-0.87$). Test-retest reliability was excellent, with intraclass correlation coefficient (2,1) at $=0.90$. Conclusion: A reliable, valid British English version of the WALS is now available for use in the UK.

Bond GR, Mascayano F, Metcalfe JD, Riley J, and Drake RE. Access, retention, and effectiveness of individual placement and support in the US: are there racial or ethnic differences? *Journal of Vocational Rehabilitation*. 2023; 58(2):175-185.

<https://doi.org/10.3233/JVR-230007>

Chattopadhyay SK, Jacob V, Hopkins DP, Lansky A, Elder R, Cuellar AE, et al. Community guide methods for systematic reviews of economic evidence. *American Journal of Preventive Medicine*. 2023; 64(4):569-578.

<https://doi.org/10.1016/j.amepre.2022.10.015>

Abstract: INTRODUCTION: Community Guide systematic economic reviews provide information on the cost, economic benefit, cost-benefit, and cost-effectiveness of public health interventions recommended by the Community Preventive Services Task Force on the basis of evidence of effectiveness. The number and variety of economic evaluation studies in public health have grown substantially over time, contributing to methodologic challenges that required updates to the methods for Community Guide systematic economic reviews. This paper describes these updated methods. METHODS: The 9-step Community Guide economic review process includes prioritization of topic, creation of a coordination team, conceptualization of review, literature search, screening studies for inclusion, abstraction of studies, analysis of results, translation of evidence to Community Preventive Services Task Force economic findings, and dissemination of findings and evidence gaps. The methods applied in each of these steps are reported in this paper. RESULTS: Two published Community Guide reviews, tailored pharmacy-based interventions to improve adherence to medications for cardiovascular disease and permanent supportive housing with housing first to prevent homelessness, are used to illustrate the application of the updated methods. The Community Preventive Services Task Force reached a finding of cost-effectiveness for the first intervention and a finding of favorable cost-benefit for the second on the basis of results from the economic reviews. CONCLUSIONS: The updated Community Guide economic systematic review methods provide transparency and improve the reliability of estimates that are used to derive a Community Preventive Services Task Force economic finding. This may in turn augment the utility of Community Guide economic reviews for communities making decisions about allocating limited resources to effective programs

Fisk K, Nordander C, and Ek A. Hand-arm vibration: Swedish carpenters' perceptions of health and safety management. *Occupational Medicine*. 2023; 73(2):85-90.

<https://doi.org/10.1093/occmed/kqad013> [open access]

Abstract: BACKGROUND: Workers in the construction industry are highly exposed to vibration from handheld equipment, which can have negative effects on the nerves and blood vessels in the hands. Employers in this industry often fail to comply with legislation regarding vibration exposure. AIMS: To assess carpenters' perceptions of proactive health and safety (H&S) management regarding hand-arm vibration exposure at construction sites in Sweden. METHODS: The carpenters answered a questionnaire on their perception of the

implementation of H&S management, on symptoms indicating injury and on the use of vibrating equipment. RESULTS: One hundred and ninety-four carpenters from 4 construction companies and 18 construction sites completed the questionnaire. Attitudes to H&S management were generally positive. However, 36% of the carpenters reported that the H&S regulations and routines did not function in practice, and 40% claimed they did not receive necessary information on the exposure and effects of vibration. Most respondents (74%) perceived a high risk of injury in general in their work. Younger carpenters, carpenters employed at smaller companies and carpenters with symptoms indicating injury or with higher vibration exposure reported more negative perceptions. CONCLUSIONS: In general, the carpenters were positive about management's commitment to H&S management. However, the results indicate deficiencies in the way in which this commitment is applied in practice at the workplace. This highlights the importance of raising awareness concerning vibration exposure and possible injuries, and strengthening proactive H&S programmes, especially in smaller companies

Nejstgaard CH, Laursen DRT, Lundh A, and Hrobjartsson A. Commercial funding and estimated intervention effects in randomized clinical trials: systematic review of meta-epidemiological studies. Research Synthesis Methods. 2023; 14(2):144-155.

<https://doi.org/10.1002/jrsm.1611>

Abstract: We investigated to which degree commercial funding is associated with estimated intervention effects in randomized trials. We included meta-epidemiological studies with published data on the association between commercial funding and results or conclusions of randomized trials. We searched five databases and other sources. We selected one result per meta-epidemiological study, preferably unadjusted ratio of odds ratios (ROR), for example, odds ratio(commercial funding)/odds ratio(noncommercial funding). We pooled RORs in random-effects meta-analyses (ROR <1 indicated exaggerated intervention effects in commercially funded trials), subgrouped (preplanned) by study aim: commercial funding per se versus risk of commercial funder influence. We included eight meta-epidemiological studies (264 meta-analyses, 2725 trials). The summary ROR was 0.95 (95% confidence interval 0.85-1.06). Subgroup analysis revealed a difference ($p = 0.02$) between studies of commercial funding per se, ROR 1.06 (0.95-1.17) and studies of risk of commercial funder influence, ROR 0.88 (0.79-0.97). In conclusion, we found no statistically significant association between commercial funding and estimated intervention effects when combining studies of commercial funding per se and studies of risk of commercial funder influence. A preplanned subgroup analysis indicated that trials with high risk of commercial funder influence exaggerated intervention effects by 12% (21%-3%), on average. Our results differ from previous theoretical considerations and findings from methodological studies and therefore call for confirmation. We suggest it is prudent to interpret results from commercially funded trials with caution, especially when there is a risk that the funder had direct influence on trial design, conduct, analysis, or reporting

Jung H, Seo W, and Kang Y. Differences in workers' safety behavior by project size and risk level of work in South Korea. *Journal of Construction Engineering and Management*. 2023; 149(5):04023028.

<https://doi.org/10.1061/JCEMD4.COENG-12890>

Labrecque C, Lecours A, Gilbert MH, and Boucher F. Workers' perspectives on the effects of telework during the COVID-19 pandemic on their well-being: a qualitative study in Canada. *Work*. 2023; 74(3):785-798.

<https://doi.org/10.3233/WOR-220029>

Abstract: BACKGROUND: The COVID-19 pandemic caused an unprecedented health emergency across the world. Public health measures aimed at slowing the spread of the virus impose measures concerning physical distancing that citizens must observe. Thousands of workers quickly found themselves having to telework, with no preparation by their organizations. The literature reports the positive effects of teleworking on certain indicators of well-being, as well as best teleworking practices in a normal context. The urgent and unplanned nature of the switch to teleworking in a crisis may have changed the relationship between teleworking and well-being. OBJECTIVE: This study aimed to explore workers' perspectives on teleworking in the context of the COVID-19 pandemic, regarding its effects on their well-being. METHODS: Following a descriptive interpretive research design, we collected qualitative data from 15 teleworkers via focus groups and individual interviews. Two researchers used a thematic analysis strategy to analyze the data. RESULTS: Data analysis led to identifying 16 factors that participants cited as influencing the well-being of teleworkers. These form eight categories: delays related to uncertainty, manager practices, organizational practices, social interactions, job characteristics, teleworking space, personal realities and personal practices. The results show the influence of interactions between work demands, control and social support on the well-being of workers. CONCLUSION: Because of its many advantages, organizations and their workers will increasingly engage in telework. The influences of telework on people's well-being call for implementing concrete "best practices" that are applicable and that consider workers' perspectives

Lambert A, McKelvey S, Getzel EE, Belluscio T, and Parthemos C. Perspectives on the implementation of pre-ETS services: identification of barriers and facilitators to early career planning for youth with disabilities. *Journal of Vocational Rehabilitation*. 2023; 58(2):103-114.

<https://doi.org/10.3233/JVR-230001>

Lee BEC, Ling M, Boyd L, Olsson C, and Sheen J. The prevalence of probable mental health disorders among hospital healthcare workers during COVID-19: a systematic review and meta-analysis. *Journal of Affective Disorders*. 2023; 330:329-345.

<https://doi.org/10.1016/j.jad.2023.03.012> [open access]

Abstract: Objectives: The mental health impacts of the COVID-19 pandemic continue to be

documented worldwide with systematic reviews playing a pivotal role. Here we present updated findings from our systematic review and meta-analysis on the mental health impacts among hospital healthcare workers during COVID-19. Methods: We searched MEDLINE, CINAHL, PsycINFO, Embase and Web Of Science Core Collection between 1st January 2000 to 17th February 2022 for studies using validated methods and reporting on the prevalence of diagnosed or probable mental health disorders in hospital healthcare workers during the COVID-19 pandemic. A meta-analysis of proportions and odds ratio was performed using a random effects model. Heterogeneity was investigated using test of subgroup differences and 95 % prediction intervals. Results: The meta-analysis included 401 studies, representing 458,754 participants across 58 countries. Pooled prevalence of depression was 28.5 % (95 % CI: 26.3-30.7), anxiety was 28.7 % (95 % CI: 26.5-31.0), PTSD was 25.5 % (95 % CI: 22.5-28.5), alcohol and substance use disorder was 25.3 % (95 % CI: 13.3-39.6) and insomnia was 24.4 % (95 % CI: 19.4-29.9). Prevalence rates were stratified by physicians, nurses, allied health, support staff and healthcare students, which varied considerably. There were significantly higher odds of probable mental health disorders in women, those working in high-risk units and those providing direct care. Limitations: Majority of studies used self-report measures which reflected probable mental health disorders rather than actual diagnosis. Conclusions: These updated findings have enhanced our understanding of at-risk groups working in hospitals. Targeted support and research towards these differences in mental health risks are recommended to mitigate any long-term consequences.

Nasri SM, Susilowati IH, Hasiholan BP, Sitanggang AN, Gede Jyotidiwy IA, Satria N, et al. The risk factors for musculoskeletal symptoms during work from home due to the COVID-19 Pandemic. *Safety and Health at Work*. 2023; 14(1):66-70.

<https://doi.org/10.1016/j.shaw.2023.01.002> [open access]

Abstract: BACKGROUND: Online teaching and learning extend the duration of using gadgets such as mobile phones and tablets. A prolonged usage of these gadgets in a static position can lead to musculoskeletal disorders (MSD). Therefore, this study aims to identify the risk factors related to musculoskeletal symptoms while using gadgets during work from home due to the COVID-19 pandemic. METHOD: A cross-sectional survey with online-based questionnaires was collected from the University of Indonesia, consisting of lecturers, students, and managerial staff. The minimum number of respondents was 1,080 and was defined by stratified random sampling. Furthermore, the dependent variable was musculoskeletal symptoms, while the independent were age, gender, job position, duration, activity when using gadgets, and how to hold them. RESULT: Most of the respondents had mobile phones but only 16% had tablets. Furthermore, about 56.7% have used a mobile phone for more than 10 years, while about 89.7% have used a tablet for less than 10 years. A multivariate analysis found factors that were significantly associated with MSD symptoms while using a mobile phone, such as age, gender, web browsing activity, work, or college activities. These activities include doing assignments and holding the phone with two hands with two thumbs actively operating. The factors that were significantly associated with MSD

symptoms when using tablets were gender, academic position, social media activity, and placing the tablet on a table with two actively working index fingers. **CONCLUSION:** Therefore, from the results of this study it is necessary to have WFH and e-learning policies to reduce MSD symptoms and enhance productivity at work

Pavilanis A, Truchon M, Achille M, Cote P, and Sullivan MJ. Perceived injustice as a determinant of the severity of post-traumatic stress symptoms following occupational injury. *Journal of Occupational Rehabilitation*. 2023; 33(1):134-144.

<https://doi.org/10.1007/s10926-022-10056-5> [open access]

Abstract: **BACKGROUND:** The present study assessed the role of perceived injustice in the experience and persistence of post-traumatic stress symptoms (PTSS) following work-related musculoskeletal injury. **METHODS:** The study sample consisted of 187 individuals who were absent from work as a result of a musculoskeletal injury. Participants completed measures of pain severity, perceived injustice, catastrophic thinking, post-traumatic stress symptoms, and disability on three occasions at three-week intervals. **RESULTS:** Consistent with previous research, correlational analyses revealed significant cross-sectional relations between pain and PTSS, and between perceived injustice and PTSS. Regression analysis on baseline data revealed that perceived injustice contributed significant variance to the prediction of PTSS, beyond the variance accounted for by pain severity and catastrophic thinking. Sequential analyses provided support for a bi-directional relation between perceived injustice and PTSS. Cross-lagged regression analyses showed that early changes in perceived injustice predicted later changes in PTSS and early changes in PTSS predicted later changes in perceived injustice. **CONCLUSIONS:** Possible linkages between perceived injustice and PTSS are discussed. The development of effective intervention techniques for targeting perceptions of injustice might be important for promoting recovery of PTSS consequent to musculoskeletal injury

Reiche BS, Dimitrova M, Westman M, Chen S, Wurtz O, Lazarova M, et al. Expatriate work role engagement and the work-family interface: a conditional crossover and spillover perspective. *Human Relations*. 2023; 76(3):452-482.

<https://doi.org/10.1177/00187267211046816>

Salguero-Caparrros F and Rubio-Romero JC. Evaluation and comparison of selected methodologies to investigate occupational accidents. *Work*. 2023; 74(3):1077-1089.

<https://doi.org/10.3233/WOR-211297>

Abstract: **BACKGROUND:** The choice of the "right" methodology to carry out the occupational accident investigation process is not an easy task. Each methodology has different conceptual and practical characteristics. The choice will depend to a large extent on the conceptual accident model being used. **OBJECTIVE:** The aim of this study has been to evaluate and compare a set of nine methodologies recognised as the most widely used in the field of occupational accident investigation. **METHODS:** For this purpose, six evaluation criteria are used which have already been applied and validated by the scientific community with a clear

emphasis on the holistic nature of these methodologies. RESULTS: The results show a detailed analysis of the conceptual, methodological and practical characteristics of the nine selected occupational accident investigation methodologies. The conceptual framework of each of the methodologies, their holistic characteristics in terms of whether they cover the complete information cycle and its possible interrelation, reliability and validity of the methodologies, the experience required for their application, the flexibility in terms of being able to be used in different work environments and finally the ability of the methodology to motivate organisational improvement are presented. CONCLUSIONS: From this study, it is clear that the analysis of occupational accident investigation it is becoming increasingly necessary to employ scientific methodologies with a clear proactive approach in order to meet the challenges of changing socio-technical systems

Thern E, Matilla-Santander N, Bodin T, and Hemmingsson T. Precarious employment at a young age and labor-market marginalization during middle-adulthood: a register-linked cohort study. *Scandinavian Journal of Work, Environment & Health*. 2023; 49(3):201-210. <https://doi.org/10.5271/sjweh.4079> [open access]

Abstract: OBJECTIVE: The present study aims to investigate the association between exposure to precarious employment three years after graduation and the risk of labor market marginalization (LMM) ten years later. METHODS: A registered-linked cohort study based on the Swedish Work, Illness, and Labor-market Participation (SWIP) cohort was conducted among all individuals born between 1973 and 1976, who were registered in Sweden the year they turned 27 years old (N=365 702). Information on the exposure of labor market establishment three years after graduating from school and outcome of LMM ten years after graduating was collected from nationwide registers. Relative risk ratios (RRR) with 95% confidence intervals (CI) were obtained by multinomial logistic regression. RESULTS: After considering important covariates, young adults in precarious employment three years after graduation were at an increased risk of future long-term unemployment (RRR 2.31), later precarious employment (RRR 2.85), and long-term sickness absence/disability pension (RRR 1.43) compared to individuals who had obtained standard employment arrangements within three years of graduating. Young precariously employed men had a slightly strong association compared to females with regards to all outcomes. CONCLUSION: The result of this study suggests that both young men and women in precarious employment three years after graduation are more likely to have a weaker attachment to the labor force later in life compared to individuals of the same age in standard employment. This is important as the prevalence of precarious employment is increasing globally, and young adults appear to be especially vulnerable

Wingate K, Dalsey E, and Scott DP. A review of occupational safety and health research for American Indians and Alaska Natives. *Journal of Safety Research*. 2023; 84:204-211. <https://doi.org/10.1016/j.jsr.2022.10.020>

Abstract: INTRODUCTION: To better understand what is known about issues affecting

American Indian and Alaska Native (AI/AN) workers, authors conducted a literature review of publications specific to AI/AN and occupational safety and health. METHODS: Search criteria included: (a) American Indian tribes and Alaska Native villages in the United States; (b) First Nations and aboriginals in Canada; and (c) occupational safety and health. RESULTS: Results of two identical searches in 2017 and 2019 identified 119 articles and 26 articles respectively, with references to AI/AN people and occupation. Of the 145 total articles, only 11 articles met the search criteria for addressing occupational safety and health research among AI/AN workers. Information from each article was abstracted and categorized according to National Occupational Research Agenda (NORA) sector, resulting in: four articles related to agriculture, forestry, and fishing; three related to mining; one related to manufacturing; and one related to services. Two articles reported on AI/AN people and occupational well-being in general. CONCLUSIONS: The review was limited by the small number and age of relevant articles, reflecting the likelihood that findings could be out of date. General themes across the reviewed articles point to the need for increased overall awareness and education regarding injury prevention and risks associated with occupational injuries and fatalities among AI/AN workers. Similarly, increased use of personal protective equipment (PPE) is recommended for the agriculture, forestry, and fishing industries, as well as for workers exposed to metals dust. PRACTICAL APPLICATIONS: The lack of research in most NORA sectors indicates the need for heightened research efforts directed toward AI/AN workers

Yang J, Ye G, Zhang Z, Liu X, and Liu Y. Linking construction noise to worker safety behavior: the role of negative emotion and regulatory focus. *Safety Science*. 2023; 162:106093.
<https://doi.org/10.1016/j.ssci.2023.106093>

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