## research alert

May 26, 2023

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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 Long-Term Conditions Job Strain Scale, Long-Term Conditions Work Spillover Scale and Work-Health-Personal Life Perceptions Scale in four rheumatic and musculoskeletal conditions. Musculoskeletal Care. 2023; [epub ahead of print]. https://doi.org/10.1002/msc.1774 [open access]

Abstract: OBJECTIVE: The aims were to validate linguistically British-English versions of the Long-Term Conditions Job Strain Scale (LTCJSS), Long-Term Conditions Work Spillover Scale (LTCWSS) and Work-Health-Personal Life Perceptions Scale (WHPLPS) in rheumatoid arthritis, axial spondyloarthritis, osteoarthritis and fibromyalgia (FM). METHODS: The three scales were forward translated and reviewed by an expert panel prior to cognitive debriefing interviews. Participants completed a postal questionnaire. Construct validity was assessed using Rasch analysis. Concurrent validity included testing between the three scales and work (e.g., Workplace Activity Limitations Scale [WALS]) and condition-specific health scales. Two weeks later, participants were mailed a second questionnaire to measure test-retest reliability. RESULTS: The questionnaire was completed by 831 employed participants: 68% women, 53.5 (SD 8.9) years of age, with condition duration 7.7 (SD 8.0) years. The LTCJSS, LTCWSS and WHPLPS Parts 1 and 2 satisfied Rasch model requirements, but Part 3 did not. A Rasch transformation scale and Reference Metric equating scales with the WALS were created. Concurrent validity was generally good (r(s) = 0.41-0.85) for the three scales, except the WHPLPS Part 3. Internal consistency (Person Separation Index values) was consistent with group use in all conditions, and individual use except for the LTCWSS and WHPLSP Parts 1 and

Institute for Work & Health 2 in FM. Test-retest reliability was excellent, with intraclass coefficients (2,1) of 0.80-0.96 for the three scales in the four conditions. DISCUSSION: Reliable, valid versions of the British-English LTCJSS, LTCWSS and WHPLPS Parts 1 and 2 are now available for use in the UK

### \*Morassaei S, Smith PM, Wilson K, and Ghahari S. Comparing the life satisfaction of older immigrants and refugees to Canadian-born older adults: the role of immigrant admission classes. Clinical Gerontologist. 2023; [epub ahead of print].

### https://doi.org/10.1080/07317115.2023.2212660

Abstract: OBJECTIVES: Immigrant admission classes represent different entry routes to Canada and potential divergent pathways for later-life well-being. This study examined laterlife satisfaction, an important correlate of well-being, comparing levels between Canadianborn older adults with those of older immigrants and refugees by admission class and considering the role of residency time in Canada. METHODS: This study used data from the Canadian Community Health Survey (2009-2014) linked to landing records for those 55 years and older. Regression models explored the association between admission class and later-life satisfaction adjusting for covariates and stratified by residency time in Canada. RESULTS: After accounting for a range of demographic, socioeconomic, and health characteristics, economic class principal applicants and refugees had significantly lower life satisfaction than Canadian-born older adults. The negative association with life satisfaction among economic class principal applicants persisted even after accounting for residency time in Canada. CONCLUSIONS: Both admission class and length of residency in Canada are associated with levels of later-life satisfaction. Future studies should look beyond aggregated measures of immigrant status when examining determinants of well-being in later-life. CLINICAL IMPLICATIONS: Vulnerable subgroups of immigrants and refugees are at risk of experiencing lower later-life satisfaction and adverse later-life outcomes

# \*Sandhu HK, Booth K, Furlan AD, Shaw J, Carnes D, Taylor SJC, et al. Reducing opioid use for chronic pain with a group-based intervention: a randomized clinical trial. Journal of the American Medical Association. 2023; 329(20):1745-1756.

### https://doi.org/10.1001/jama.2023.6454

Abstract: Importance: Opioid use for chronic nonmalignant pain can be harmful. Objective: To test whether a multicomponent, group-based, self-management intervention reduced opioid use and improved pain-related disability compared with usual care. Design, setting, and participants: Multicentered, randomized clinical trial of 608 adults taking strong opioids (buprenorphine, dipipanone, morphine, diamorphine, fentanyl, hydromorphone, methadone, oxycodone, papaveretum, pentazocine, pethidine, tapentadol, and tramadol) to treat chronic nonmalignant pain. The study was conducted in 191 primary care centers in England between May 17, 2017, and January 30, 2019. Final follow-up occurred March 18, 2020. Intervention: Participants were randomized 1:1 to either usual care or 3-day-long group sessions that emphasized skill-based learning and education, supplemented by 1-on-1 support delivered by a nurse and lay person for 12 months. Main outcomes and measures: The 2 primary

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outcomes were Patient-Reported Outcomes Measurement Information System Pain Interference Short Form 8a (PROMIS-PI-SF-8a) score (T-score range, 40.7-77; 77 indicates worst pain interference; minimal clinically important difference, 3.5) and the proportion of participants who discontinued opioids at 12 months, measured by self-report. Results: Of 608 participants randomized (mean age, 61 years; 362 female [60%]; median daily morphine equivalent dose, 46 mg [IQR, 25 to 79]), 440 (72%) completed 12-month follow-up. There was no statistically significant difference in PROMIS-PI-SF-8a scores between the 2 groups at 12month follow-up (-4.1 in the intervention and -3.17 in the usual care groups; between-group difference: mean difference, -0.52 [95% CI, -1.94 to 0.89]; P = .15). At 12 months, opioid discontinuation occurred in 65 of 225 participants (29%) in the intervention group and 15 of 208 participants (7%) in the usual care group (odds ratio, 5.55 [95% Cl, 2.80 to 10.99]; absolute difference, 21.7% [95% CI, 14.8% to 28.6%]; P < .001). Serious adverse events occurred in 8% (25/305) of the participants in the intervention group and 5% (16/303) of the participants in the usual care group. The most common serious adverse events were gastrointestinal (2% in the intervention group and 0% in the usual care group) and locomotor/musculoskeletal (2% in the intervention group and 1% in the usual care group). Four people (1%) in the intervention group received additional medical care for possible or probable symptoms of opioid withdrawal (shortness of breath, hot flushes, fever and pain, small intestinal bleed, and an overdose suicide attempt). Conclusions and relevance: In people with chronic pain due to nonmalignant causes, compared with usual care, a groupbased educational intervention that included group and individual support and skill-based learning significantly reduced patient-reported use of opioids, but had no effect on perceived pain interference with daily life activities. Trial registration: isrctn.org Identifier: ISRCTN49470934.

### Aegerter AM, Deforth M, Volken T, Johnston V, Luomajoki H, Dressel H, et al. A multicomponent intervention (NEXpro) reduces neck pain-related work productivity loss: a randomized controlled trial among Swiss office workers. Journal of Occupational Rehabilitation. 2023; 33(2):288-300.

### https://doi.org/10.1007/s10926-022-10069-0 [open access]

Abstract: Purpose Neck pain is common among office workers and leads to work productivity loss. This study aimed to investigate the effect of a multi-component intervention on neck pain-related work productivity loss among Swiss office workers. Methods Office workers, aged 18-65 years, and without serious neck-related health problems were recruited from two organisations for our stepped-wedge cluster randomized controlled trial. The 12-week multicomponent intervention included neck exercises, health-promotion information, and workplace ergonomics. The primary outcome of neck pain-related work productivity loss was measured using the Work Productivity and Activity Impairment Questionnaire and expressed as percentages of working time. In addition, we reported the weekly monetary value of neck pain-related work productivity loss. Data was analysed on an intention-to-treat basis using a generalized linear mixed-effects model. Results Data from 120 participants were analysed

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Research Excellence Safe Work Healthy Workers with 517 observations. At baseline, the mean age was 43.7 years (SD 9.8 years), 71.7% of participants were female (N = 86), about 80% (N = 95) reported mild to moderate neck pain, and neck pain-related work productivity loss was 12% of working time (absenteeism: 1.2%, presenteeism: 10.8%). We found an effect of our multi-component intervention on neck pain-related work productivity loss, with a marginal predicted mean reduction of 2.8 percentage points (b = -0.27; 95% CI: -0.54 to -0.001, p = 0.049). Weekly saved costs were Swiss Francs 27.40 per participant. Conclusions: Our study provides evidence for the effectiveness of a multi-component intervention to reduce neck pain-related work productivity loss with implications for employers, employees, and policy makers. Trial Registration ClinicalTrials.gov, NCT04169646. Registered 15 November 2019-Retrospectively registered, https://clinicaltrials.gov/ct2/show/NCT04169646 .

## Andersen M, Maclean JC, Pesko MF, and Simon K. Does paid sick leave encourage staying at home? Evidence from the United States during a pandemic. Health Economics. 2023; 32(6):1256-1283.

### https://doi.org/10.1002/hec.4665

Abstract: We study the impact of a temporary U.S. paid sick leave mandate that became effective April 1st, 2020 on self-quarantining, proxied by physical mobility behaviors gleaned from cellular devices. We study this policy using generalized difference-in-differences methods, leveraging pre-policy county-level heterogeneity in the share of workers likely eligible for paid sick leave benefits. We find that the policy leads to increased self-quarantining as proxied by staying home. We also find that COVID-19 confirmed cases decline post-policy

## Barnett ML, Meara E, Lewinson T, Hardy B, Chyn D, Onsando M, et al. Racial inequality in receipt of medications for opioid use disorder. New England Journal of Medicine. 2023; 388(19):1779-1789.

### https://doi.org/10.1056/NEJMsa2212412

Abstract: BACKGROUND: Since 2010, Black persons in the United States have had a greater increase in opioid overdose-related mortality than other groups, but national-level evidence characterizing racial and ethnic disparities in the use of medications for opioid use disorder (OUD) is limited. METHODS: We used Medicare claims data from the 2016-2019 period for a random 40% sample of fee-for-service beneficiaries who were Black, Hispanic, or White; were eligible for Medicare owing to disability; and had an index event related to OUD (nonfatal overdose treated in an emergency department or inpatient setting, hospitalization with injection drug use-related infection, or inpatient or residential rehabilitation or detoxification care). We measured the receipt of medications to treat OUD (buprenorphine, naltrexone, and naloxone), the receipt of high-risk medications (opioid analgesics and benzodiazepines), and health care utilization, all in the 180 days after the index event. We estimated differences in outcomes according to race and ethnic group with adjustment for beneficiary age, sex, index event, count of chronic coexisting conditions, and state of residence. RESULTS: We



| Research Excellence | Safe Work | Healthy Workers identified 25,904 OUD-related index events among 23,370 beneficiaries, with 3937 events (15.2%) occurring among Black patients, 2105 (8.1%) among Hispanic patients, and 19,862 (76.7%) among White patients. In the 180 days after the index event, patients received buprenorphine after 12.7% of events among Black patients, after 18.7% of those among Hispanic patients, and after 23.3% of those among White patients; patients received naloxone after 14.4%, 20.7%, and 22.9%, respectively; and patients received benzodiazepines after 23.4%, 29.6%, and 37.1%, respectively. Racial differences in the receipt of medications to treat OUD did not change appreciably from 2016 to 2019 (buprenorphine receipt: after 9.1% of index events among Black patients vs. 21.6% of those among White patients in 2016, and after 14.1% vs. 25.5% in 2019). In all study groups, patients had multiple ambulatory visits in the 180 days after the index event (mean number of visits, 6.6 after events among Black patients, 6.7 after events among Hispanic patients, and 7.6 after events among White patients). CONCLUSIONS: Racial and ethnic differences in the receipt of medications to treat OUD after an index event related to this disorder among patients with disability were substantial and did not change over time. The high incidence of ambulatory visits in all groups showed that disparities persisted despite frequent health care contact. (Funded by the National Institute on Drug Abuse and the National Institute on Aging.)

### Brumfield L, Miner S, Tydings D, and Carey M. Occupational firefighting: a detriment to good health. Journal of Occupational & Environmental Medicine. 2023; 65(5):387-393. https://doi.org/10.1097/JOM.00000000002787

Abstract: OBJECTIVE: The purpose of the study is to evaluate the effect of an online educational module in increasing awareness of depression, substance use disorder, and sleep deprivation among firefighters in Monroe County, New York. METHOD: Firefighters were recruited via work e-mail and the snowball technique. A quantitative preintervention and postintervention study was used. Participants completed four surveys before and after completing educational online modules. RESULTS: There was a 5.11% increase in overall knowledge about sleep deprivation, depression, and substance (alcohol) use and a small decrease in the group mean for the depression and sleep deprivation scores after completion of the educational modules. CONCLUSION: Increasing content knowledge had a positive effect to participants' self-awareness during the project. Incorporating educational modules into annual firefighting training could provide opportunities to improve sleep deprivation, depression, and substance use

# Cai D, Li Z, Xu L, Fan L, Wen S, Li F, et al. Sustaining newcomers' career adaptability: the roles of socialization tactics, job embeddedness and career variety. Journal of Occupational and Organizational Psychology. 2023; 96(2):264-286.

### https://doi.org/10.1111/joop.12423 [open access]

Abstract: In this study, we aim to examine how socialization practices predict newcomers' career adaptability during their organizational transitions. Drawing on career construction theory and conservation of resources theory, we argue that newcomers' job embeddedness,

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Research Excellence Safe Work Healthy Workers as predicted by their perceived organizational socialization tactics, positively predicts their career adaptability during career transitions. We investigate the role of past transition experiences (i.e., career variety) in moderating the relationship between job embeddedness and career adaptability. Data were collected at three time points from 492 newcomers in an information technology company in China. The newcomers' perceived organizational socialization tactics (i.e., training, future prospects and coworker support) positively predicted their job embeddedness, which was positively associated with their career adaptability. Additionally, career variety weakened the positive effect of job embeddedness on career adaptability. Furthermore, career variety moderated the indirect effects of future prospects and coworker support on career adaptability via job embeddedness, but not that of training. We conclude the article with discussions of our theoretical and practical contributions.

## Durand MJ, Sylvain C, and Paquette MA. Return to work for people with common mental disorders: insights into the implementation of a collaborative program in a specialized mental health hospital. Journal of Occupational Rehabilitation. 2023; 33(2):362-374. https://doi.org/10.1007/s10926-022-10079-y

Abstract: Purpose Common mental disorders (CMDs) are a major cause of sick leave. Returnto-work (RTW) interventions providing mechanisms that support the participation and collaboration of the different stakeholders appear promising in these circumstances. The Therapeutic Return-to-Work (TRW) Program offers such mechanisms designed to enable affected workers to fully reintegrate into their jobs on a sustainable basis. This study evaluated the feasibility of implementing this program for workers with CMDs, within a specialized mental health hospital. Methods The study was conducted using a multiple case design and three main data sources: (1) the worker's medical file, (2) the log completed by the clinicians, and (3) individual interviews with stakeholders. Data were analyzed using a qualitative approach. Results Twelve workers between 32 and 60 years old, mostly women with complex mental health profiles working in large enterprises, participated in this study. Three main observations were made regarding the TRW Program implementation: (1) eight cases were characterized by complete or virtually complete implementation; (2) no explanatory factor could be identified for the different implementation levels; (3) eight cases achieved RTW success (RTW to the original job or another job), which appears partially attributable to the high level of program implementation. Conclusions: The TRW Program seems highly promising for supporting the return to work of workers with CMDs. However, studies identifying the factors likely to influence the implementation process in different health service contexts and specifying the scope and nature of the program's actual impact on RTW outcomes should be conducted before larger-scale implementation takes place



## Fernandes K, Sa Dos Reis C, and Serranheira F. Radiographers' musculoskeletal health in Western Switzerland: WRMSDs symptoms prevalence and risk factors. Work. 2023; 74(4):1527-1537.

### https://doi.org/10.3233/WOR-211379 [open access]

Abstract: Background: Work-related musculoskeletal disorders (WRMSDs) are a significant occupational health concern in radiographers. Objective: This study aimed to describe radiographers' WRMSDs symptoms prevalence and severity, exploring associations with occupational risk factors. Methods: A cross-sectional study was conducted to explore WRMSDs symptoms and occupational risk factors in radiographers of Western Switzerland using an online survey, based on the Nordic Musculoskeletal Questionnaire (NMQ). Descriptive statistics were conducted to analyze the collected data, and associative statistics to identify the risk factors related to symptoms. Results: Participants (n = 359) presented a high prevalence of WRMSDs symptoms in the last 12 months (94.7%), with a related absenteeism rate of 15.6%. In the last 7 days, symptoms prevalence was 67.7%. The most affected anatomical regions, over both time periods, were the neck (73.0%, 36.8%) and low back (67.4%, 35.7%). Associative statistics underlined risk factors affecting significantly radiographers' health (OR >2) were the "awkward postures" (OR = 2.86; 95% CI 1.78-4.58) and "feeling anxiety/stress at work" both for low back (OR = 2.38; 95% CI 1.39-4.08), and being a woman for the neck (OR = 2.64; 95% CI 1.51-4.61). Conclusions: There is a high WRMSDs symptoms prevalence in Western Switzerland radiographers. Radiographers' work demands namely for awkward postures increases the odds for WRMSDs symptoms presence, affecting predominantly neck, upper and lower back. Our data suggest that further research is needed to implement adapted prevention to this specific context.

### Forst L, Chaudhry A, Lopez A, McCarthy M, and Hebert-Beirne J. Protecting workers in the temporary staffing industry. Occupational Medicine. 2023; 73(4):203-208. https://doi.org/10.1093/occmed/kgad045

Abstract: BACKGROUND: Workers hired through temporary staffing companies have a high rate of severe and fatal injuries despite the legally mandated, shared responsibility of the temporary staffing company and the host company to assure safe work. AIMS: The aim of this study was to elucidate the perspective of temporary staffing personnel on approaches to mitigating injury risk among the workers they hire. METHODS: Based on a conceptual model representing the interplay between work and health, we conducted a 'brainstorm' of temporary staffing personnel regarding perceived barriers to protecting temporary workers. A content/context analysis used standard qualitative methods, and the findings were triangulated with notes taken during the discussion. RESULTS: Temporary staffing employers describe loss of control of the working conditions once workers are placed at host/client companies. Further, they describe a contentious relationship between temporary staffing and host companies, where it is difficult to hold host companies to account. Other barriers to providing temporary workers with a safe work environment include the temp companies' lack of knowledge of site-specific hazards, the poor quality of onsite Occupational Safety and



Health training, and ignoring Occupational Safety and Health Administration (OSHA) requirements. CONCLUSIONS: The perspective of temporary staffing companies should be considered to address the lack of cooperation and shifted responsibility described in this study. Policy and practice changes could include requiring contract language, implementing communication about safety, either sharing workers' compensation purchase or removing exclusive remedy protections from hosts, and prescribing safety training, such as an OSHA 10h programme. Suggested interventions need further study

### Lallukka T, Lahelma E, Pietilainen O, Kuivalainen S, Laaksonen M, Rahkonen O, et al. Trajectories in physical functioning by occupational class among retiring women: the significance of type of retirement and social and health-related factors. Journal of Epidemiology & Community Health. 2023; 77(6):362-368.

### https://doi.org/10.1136/jech-2022-219963

Abstract: Background: Occupational class inequalities in physical functioning and their changes after retirement are poorly understood. We examined occupational class trajectories in physical functioning 10 years before and after transition to old-age and disability retirement. We included working conditions and behavioural risk factors as covariates, given their established link to health and retirement. Methods: We used the Helsinki Health Study cohort data from surveys 2000-2002 to 2017, and included 3901 women, who were employed by the City of Helsinki, Finland, and retired during the follow-up. Mixed-effect growth curve models were used to examine changes in RAND-36 Physical Functioning subscale (range 0-100) 10 years before and after the retirement date by occupational class. Results: Old-age (n=3073) and disability retirees (n=828) lacked class differences in physical functioning 10 years before retirement. By retirement transition, physical functioning declined and class inequalities emerged, the predicted scores being 86.1 (95% CI 85.2 to 86.9) for higher class and 82.2 (95% CI 81.5 to 83.0) for lower class old-age retirees, and 70.3 (95% CI 67.8 to 72.9) for higher class and 62.2 (95% CI 60.4 to 63.9) for lower class disability retirees. Physical functioning declined and class inequalities slightly widened among old-age retirees after the retirement, whereas among disability retirees the decline plateaued and class inequalities narrowed over time after retirement. Physical work and body mass index somewhat attenuated the class inequalities after adjustment. Conclusions: Class inequalities in physical functioning widened after old-age retirement and narrowed after disability retirement. The examined work and health-related factors contributed weakly to the inequalities.

### McKetta S, Prins SJ, Hasin D, Patrick ME, and Keyes KM. Structural sexism moderates work and occupational risks for alcohol consumption and binge drinking among US women, 1989-2016. Social Science & Medicine. 2023; 324:115878.

### https://doi.org/10.1016/j.socscimed.2023.115878

Abstract: Background: People in the labor force and in high-status careers consume alcohol at high rates. State-level structural sexism (sex inequality in political/economic status) is

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inversely related to alcohol use among women. We examine whether structural sexism modifies women's labor force characteristics and alcohol consumption. Methods: We surveyed frequency of alcohol consumption in the past month and any binge drinking in the past two weeks among women ages 19-45 in Monitoring the Future from 1989 to 2016 (N = 16,571) in relation to occupational characteristics (including employment status, high-status career, and occupational gender composition) and structural sexism (measured using statelevel indicators of gender inequality) with multilevel interaction models controlled for statelevel and individual confounders. Findings: Working women and women in high-status occupations had higher risks of alcohol consumption than non-working women; differences were most pronounced in lower-sexism states. At the lowest sexism levels, employed women consumed alcohol more frequently (2.61 occasions of use in past 30 days, 95% CI 2.57, 2.64) than unemployed women (2.32, 95% CI 2.27, 2.37). Patterns were more pronounced for frequency of alcohol consumption than binge drinking. Occupational gender composition did not influence alcohol consumption. Interpretation: In lower sexism states, working and having a high-status career are associated with increased alcohol consumption for women. Labor force engagement extends positive health benefits to women, but it also confers specific risks, which are sensitive to the broader social context; these findings contribute to a growing literature suggesting that alcohol risks are changing in relation to shifting social landscapes.

## Nedic O and Belkic K. Job stressors and burnout among nurses and primary-care physicians working at a dedicated outpatient respiratory center for patients with suspected or confirmed COVID-19. American Journal of Industrial Medicine. 2023; 66(6):510-528. https://doi.org/10.1002/ajim.23475

Abstract: Background: High burnout is reported among health professionals providing inpatient care to patients with coronavirus disease 2019 (COVID-19). Data are lacking on job stressors and burnout among health providers working in dedicated outpatient facilities for patients with suspected or confirmed COVID-19. Methods: This cross-sectional study, using a parallel mixed-methods design, was carried out in 2021-2022 among 22 nurses and 22 primary-care physicians working at a COVID Outpatient Respiratory Center (CORC) (100% participation). Work conditions were assessed via the nurse- and physician-specific Occupational Stressor Index (OSI) and occupational records. Measures of the outcome included the Copenhagen Burnout Index and current tobacco use. Results: Time working in CORC displayed significant multivariate associations with personal, work- and patient-related burnout among physicians and current tobacco use among nurses. Total OSI scores showed adjusted odds ratios for work-related  $(1.35 (1.01 \pm 1.79))(1.31 (0.99 \pm 1.75))$  and patientrelated burnout (1.35 (1.01 ± 1.81))(1.34 (1.01 ± 1.78)) among physicians and nurses, respectively. Numerous work stressors showed significant multivariate associations with burnout and smoking. Among the stressors were: being contacted outside work hours about patients, inadequate rest breaks, many patients/shifts, difficulty taking time off, insufficient pay, frequently listening to emotionally disturbing accounts, interruptions, increased

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& Research Excellence Safe Work Healthy Workers workload, time pressure, and responsibility. Heavy patient burden/time pressure was most often cited as the hardest part of work in CORC. Increased employment of staff was the most frequently suggested workplace modification. Integrative assessment reveals that increased staff could ameliorate many work stressors associated with burnout and smoking in this cohort. Conclusions: Working in CORC is an extra burden. In crisis situations such as the COVID pandemic, more staff is needed. Lowering the total job stressor load is vital.

## Soupene VA, Davis J, Fogner A, and Casteel C. Circumstances contributing to installation, maintenance, and repair worker death by suicide. Journal of Occupational & Environmental Medicine. 2023; 65(5):394-400.

### https://doi.org/10.1097/JOM.000000000002789

Abstract: OBJECTIVE: To examine risk factors related to death by suicide among installation, maintenance, and repair (IMR) workers compared with workers in other occupational groups. METHODS: The National Violent Death Reporting System (NVDRS) data for the years 2013 to 2018 was used to identify suicide deaths. Circumstance variables were used to examine differences between IMR workers and other workers. RESULTS: Having a physical health problem (1.13; 95% confidence interval [CI], 1.03 to 1.23) or a diagnosis of posttraumatic stress disorder (1.24; 95% CI, 1.03 to 1.50) was more likely to contribute to IMR worker suicide compared with other occupations. Installation, maintenance, and repair workers were less likely to receive treatment for a mental health diagnosis or substance use disorder (0.88; 95% CI, 0.81 to 0.94). CONCLUSIONS: Additional support for physical health problems, posttraumatic stress disorder diagnoses, and mental health care access among IMR workers may reduce suicide deaths

## Tanimoto AS, Richter A, and Lindfors P. How do effort, reward, and their combined effects predict burnout, self-rated health, and work-family conflict among permanent and fixed-term faculty? Annals of Work Exposures and Health. 2023; 67(4):462-472. https://doi.org/10.1093/annweh/wxac094 [open access]

Abstract: Employment conditions and psychosocial factors have been linked to various health-related outcomes in different occupational groups, but few studies focus on the conditions in academia. This study explores the effects of effort, reward, and their interaction to explain health-related outcomes, namely burnout, self-rated health, and work-family conflict among academic faculty in Sweden. We also explore these effects among those with permanent and fixed-term employment contracts. Questionnaire data, collected online in 2016, came from 2335 employees (57% women) with a doctoral degree, working at a Swedish higher education institution. Latent moderation analysis combined with multi-group analysis was conducted. Main effects of effort were found for all health-related outcomes revealing that effort was associated with higher burnout, poorer self-rated health, and greater work-family conflict. Reward was negatively associated with burnout and self-rated health revealing that reward reduced burnout and improved self-rated health. The interaction between effort and reward was significantly associated with all outcomes among

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permanent contract employees, but was non-significant among those with fixed-term contracts. This may suggest that fixed-term faculty are less affected by the presence or lack of reward. Overall, the findings emphasize the importance of the psychosocial work environment to understand health-related consequences for permanent and fixed-term faculty with a doctoral degree

## Uttley L, Quintana DS, Montgomery P, Carroll C, Page MJ, Falzon L, et al. The problems with systematic reviews: a living systematic review. Journal of Clinical Epidemiology. 2023; 156:30-41.

### https://doi.org/10.1016/j.jclinepi.2023.01.011 [open access]

Abstract: OBJECTIVES: Systematic reviews and meta-analyses are proliferating as they are an important building block to inform evidence-based guidelines and decision-making. Enforcement of best practice in clinical trials is firmly on the research agenda of good clinical practice, but there is less clarity as to how evidence syntheses that combine these studies can be influenced by bad practice. Our aim was to conduct a living systematic review of articles that highlight flaws in published systematic reviews to formally document and understand these problems. STUDY DESIGN AND SETTING: We conducted a comprehensive assessment of all literature examining problems, which relate to published systematic reviews. RESULTS: The first iteration of our living systematic review (https://systematicreviewlution.com/) has found 485 articles documenting 67 discrete problems relating to the conduct and reporting of systematic reviews which can potentially jeopardize their reliability or validity. CONCLUSION: Many hundreds of articles highlight that there are many flaws in the conduct, methods, and reporting of published systematic reviews, despite the existence and frequent application of guidelines. Considering the pivotal role that systematic reviews have in medical decisionmaking due to having apparently transparent, objective, and replicable processes, a failure to appreciate and regulate problems with these highly cited research designs is a threat to credible science

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