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

**Adao D, Martins GCL, Zanini LYK, and Herbella F. Integrating safety culture, environment, and sensory perceptions in the operating room: a narrative review. *Langenbeck's Archives of Surgery*. 2025; 410(1):281.**

<https://doi.org/10.1007/s00423-025-03813-6> [open access]

Abstract: **PURPOSE:** The aim of this study is to review the literature and reflect on the importance of sensory perceptions—colors, sounds, odors, taste, and kinetics (tactile and postural)—alongside team behavior and safety culture in the operating room. **METHODS:** MEDLINE search via PubMed up to March 2025, using both free terms and MeSH related to surgery, sensory perception, safety culture, and situational awareness in the operating room. Only English-language studies were included, with a focus on recent publications. Article selection was based on relevance to the core themes of the review. **RESULTS:** The study highlights how visual, auditory, olfactory, and thermal stimuli influence team performance and decision-making in the operation room. Color schemes, alarm sounds, ambient odors, and temperature control all play key roles in enhancing situational awareness and patient safety. Effective posture, communication, and ergonomics further contribute to minimizing errors and promoting a safety-driven culture. **CONCLUSION:** The senses, along with communication and discipline, help the team respond effectively to critical situations. Like in aviation, sensory awareness is central to a strong safety culture

**Cheung G, Ronaldson A, and Henderson C. Relationships between occupation, attitudes towards mental health problems in the workplace and mental health stigma. *Social Psychiatry and Psychiatric Epidemiology*. 2025; 60(10):2301-2310.**

<https://doi.org/10.1007/s00127-025-02927-y>

Abstract: PURPOSE: Discrimination against people with mental health problems in the workplace is still prominent. Characteristics of occupations can influence aspects of stigma and attitudes to mental health problems in the workplace context. We investigated occupational differences in mental health stigma, and attitudes to mental health in the workplace. METHODS: Data from the British Social Attitudes 2015 survey were used. Logistic and linear regression models were conducted to investigate associations between occupational categories, stigma as measured by desire for social distance, and attitudes towards mental health in the workplace. RESULTS: We found occupational differences in attitudes towards mental health in the workplace, but not in levels of stigma. Compared to managerial and professional workers, lower supervisory and technical workers (group 4), semi-routine and routine workers (group 5) were less likely to believe that paid work is good for mental health (group 4: odds ratio (OR) = 0.38, 95% confidence interval (CI) = 0.24-0.61; group 5: OR = 0.34, 95% CI = 0.24-0.49) and people with depression should return to work when they can do some or most of the job (group 4: OR = 0.67, 95% CI = 0.48-0.94; group 5: OR=0.52, 95% CI=0.41-0.66). People in semi-routine and routine occupations were less likely to believe that having schizophrenia should not affect promotion at work (OR = 0.78, 95% CI = 0.62-0.97) than managerial and professional workers. CONCLUSIONS: Our findings reinforce the importance of job characteristics on attitudes to mental health in the workplace. More support is needed for small companies to help them develop mental health policies. Modifications are needed to improve job control and ensure adjustments can be made

**Curti S, Gallo M, Nocilla MR, Montagnani A, Mattioli S, Gnoni MG, et al. Safety culture maturity models in occupational safety and health: an updated scoping review. *Safety Science*. 2025; 192:107003.**

<https://doi.org/10.1016/j.ssci.2025.107003> [open access]

**Goncalves L, Lau B, Costa C, Amaro A, and Ribeiro F. Comparing the impact of workplace lifestyle interventions: a 7-month study on cardiovascular health, life satisfaction, and quality of life. *Journal of Occupational & Environmental Medicine*. 2025; 67(10):798-804.**

<https://doi.org/10.1097/JOM.0000000000003458>

Abstract: OBJECTIVE: This study aimed to assess the effects of a workplace multicomponent lifestyle intervention compared to active breaks and health education on cardiovascular risk factors, subjective well-being, and quality of life. METHODS: A total of 266 industry workers were assigned to three groups: lifestyle, health education, or active breaks. All received lifestyle guidance. The lifestyle group participated in resistance exercise and active breaks. The active breaks group performed only active breaks, whereas the education group received lifestyle guidance without exercise. RESULTS: Diastolic blood pressure and sitting time decreased in all groups, with no between-group differences. Only the lifestyle group increased moderate-intensity physical activity. Life satisfaction improved significantly across groups. CONCLUSIONS: All interventions improved diastolic blood pressure, sitting time, and life satisfaction, whereas only the lifestyle intervention increased moderate-intensity physical activity

**Halmetoja A, Makinen N, Ojala S, and Jauhiainen S. Wage subsidy for employers or social security for low-paid workers? The impact of the earnings disregard reform on the use of housing allowance among workers in different industries in Finland. *Social Policy & Administration*. 2025; 59(5):815-827.**

<https://doi.org/10.1111/spol.13083> [open access]

Abstract: ABSTRACT The longstanding aim of social security reforms in economically advanced countries has been to ensure that work is financially beneficial. In-work benefits (IWB) have emerged as pivotal tools in achieving this objective. Earnings disregards, which exempt a portion of earned income from benefit calculations, represent one form of IWBs. This study focuses on Finland's general housing allowance, examining its use following the 2015 reform that introduced the earnings disregard. Using the total population registry of all single-adult households from 2011 to 2018, we observed a significant rise in housing allowance recipients with earned income, underscoring the growing role of the allowance as an IWB. There was a notable increase in housing allowance recipients, particularly in low-wage service sectors and industries marked by atypical employment patterns. Although IWBs contribute to low-paid workers' earnings, the empirical findings raise the critical question of whether these benefits form wage subsidies that incentivise employers to further increase the use of low-paid, non-standard jobs

**Huang Y, Rumrill S, Chun J, and Osak R. Demographic and vocational rehabilitation service correlates of employment outcomes in people with substance use disorders during COVID-19. *Rehabilitation Counseling Bulletin*. 2025; 69(1):39-55.**

<https://doi.org/10.1177/00343552241236870>

**Jones MT, Kaltenecker H, Cronin RA, and Wright BJ. Gender differentiates the predictors of an intention to leave the workplace: a meta-analysis of the effort-reward imbalance workplace stress studies. *Work and Stress*. 2025; 39(3):250-271.**

<https://doi.org/10.1080/02678373.2024.2364616> [open access]

Abstract: Workplace stress is related to job turnover and intention to leave (ITL) the job and/or profession. The specific mechanisms that drive this association have received less attention, however substantive research using the effort-reward imbalance (ERI) workplace stress model provides an avenue to address this issue and inform workplace interventions to improve employee retention. Our meta-analysis of the associations of components of the ERI model with ITL ( $k = 23$ ,  $N = 73,671$ ) demonstrated that low rewards ( $r = -.41$ ,  $CI: -.46, -.37$ ) were more associated with an ITL than ERI ( $r = .33$   $CI: .27, .38$ ), overcommitment ( $r = .26$ ,  $CI: .21, .31$ ), and effort ( $r = .25$ ,  $CI: .20, .30$ ). Moderation analysis showed that females were more likely than males to report ITL when effort was high and that males were more likely to report an ITL the profession when rewards were low. Although all components of the ERI model were related cross-sectionally with ITL, prospective designs that target male-dominated professions are required to assess if the findings are robust.

**Keller E, Chen L, Gao F, and Li J. Risk for diabetes from long working hours and night work in the United States: prospective associations and machine learning techniques. *Safety and Health at Work*. 2025; 16(3):355-360.**

<https://doi.org/10.1016/j.shaw.2025.05.005> [open access]

Abstract: BACKGROUND: Diabetes contributes significantly to death in the U.S., with many working-age individuals affected. This research determined the independent and joint associations of long

working hours and night work with diabetes risk in U.S. workers, and their contribution to risk prediction. **METHODS:** This prospective study included 1,454 workers from the Midlife in the United States (MIDUS) study with 9-year follow-up. Long working hours included those working 55 or more hours per week. Night work involved those working 16 or more nights per year. Diabetes was determined by self-reported diagnosis or treatment. Multivariable Poisson regression analysis was applied to examine the prospective association of these work-related factors at baseline with incident diabetes. A gradient boosting machine learning model was used to investigate the contributions of both factors in predicting incident diabetes. **RESULTS:** Long working hours (RR and 95% CI = 1.60 [1.04, 2.46],  $p < 0.05$ ) and night work (RR and 95% CI = 1.66 [1.05, 2.62],  $p < 0.05$ ) were independently associated with the risk for diabetes, while controlling for baseline covariates. Gradient boosting analysis suggested long working hours and night work facilitated diabetes incidence. Exposure to both long working hours and night work increased the risk for diabetes (RR and 95% CI = 3.02 [1.64, 5.58],  $p < 0.001$ ), suggesting additive interaction. **CONCLUSION:** Organizations may consider reducing hours on duty and improving shift systems for primary prevention of diabetes

**Mutlu S and Yilmaz E. The impact of musculoskeletal pain on the work functions and quality of life of office workers. *Work*. 2025; 81(4):3369-3375.**

<https://doi.org/10.1177/10519815251332851>

**Abstract:** Background: Office workers often experience musculoskeletal pain, and this condition significantly impacts their quality of life and work function. Objective: Musculoskeletal pain is common among office workers. The study was conducted to determine the impact of musculoskeletal pain on work functions and quality of life in office workers. Methods: A descriptive cross-sectional study was conducted with 263 office workers. A personal information form, Work Role Functioning Questionnaire (WRFQ), Visual Analog Scale (VAS) and a 12-item Short Form Health Survey were used to collect data. The questionnaire forms were prepared using Google Forms and distributed and collected via WhatsApp. The data were analyzed using the Mann-Whitney U test, descriptive statistics and Spearman's correlation coefficient. Results: Among 263 office workers, 68.1% reported pain in the neck, 52.1% in the shoulder, 47.5% in the lower back, and 33.8% in the elbow. A strong, negative, significant correlation was found between the pain intensity of the participants and the total score of the WRFQ ( $rs = -0.743$ ,  $p < 0.001$ ). A moderate negative relationship was found between pain intensity and the physical component summary (12), mental component summary (12) and WRFQ subscales, and a strong negative relationship was found with the WRFQ total score ( $p < 0.05$ ). Conclusion: It has been found that office workers are most likely to suffer from neck pain and this pain negatively affects their work functions and quality of life.

**Oikawa M, Otake T, Awatani T, Noguchi H, and Kawamura A. Impacts of health checkup programs standardization on working-age self-employed and unemployed: insights from Japan's local government response to national policy. *Journal of Health Economics*. 2025; 103:103046.**

<https://doi.org/10.1016/j.jhealeco.2025.103046>

**Abstract:** This study analyzes the effects of the expansion of municipal per capita expenses on health checkup programs, following the introduction of the Specific Health Checkups and Specific Health Guidance (SHC-SHG), on the health outcomes and behaviors of self-employed and unemployed populations, which have been largely overlooked by previous research. To address this, we applied a dosing difference-in-differences (DID) estimation method, exploiting variation in treatment intensity

across municipalities. The DID estimation reveals that the SHC-SHG introduction led to a reduction in the proportion of people diagnosed with lifestyle-related diseases in the municipalities that required significant increases in per-capita health checkup program expenses to comply with the new program, with a more pronounced impact on those with multiple diagnoses compared to those with a single diagnosis. A subgroup analysis indicates that health improvements following the SHC-SHG introduction were observed among self-employed workers and homeowners, whereas such improvements were not evident among the unemployed and renters. Moreover, we identify significant behavioral changes among the population in the high-expansion municipalities following the policy introduction. A back-of-the-envelope calculation demonstrates the municipal response to the SHC-SHG introduction is cost-effective

**Osorio C, Talwar S, Stevelink SAM, Sihre HK, Lamb D, and Billings J. Systematic review and meta-analysis on the mental health of emergency and urgent call-handlers and dispatchers. *Occupational Medicine*. 2025; 75(6):282-291.**

<https://doi.org/10.1093/occmed/kqae104> [open access]

Abstract: Background: Call-handlers and dispatchers (CHDs) working in specialized emergency and urgent communication centres are essential in supporting public safety and health. Evidence suggests that these professionals are at increased risk of mental health conditions, including post-traumatic stress disorder (PTSD), depression, anxiety and alcohol abuse among other conditions; however, reliable prevalence estimates remain undetermined. Aims: We provide the estimated pooled prevalence for PTSD, depression, anxiety and hazardous drinking among emergency and urgent CHDs globally. Methods: We searched 10 electronic databases, grey literature and the Annals of Emergency Dispatch and Response. Eligible studies reported original quantitative data and used validated self-reported measures on the prevalence of mental health conditions of interest (i.e. PTSD, depression, anxiety and alcohol use) within CHD professionals. Three reviewers independently screened results for eligibility. Prevalence estimates were pooled using random-effects meta-analyses. Results: In total, 16 857 references were retrieved. From these, 183 full-text articles were assessed for eligibility, of which 37 articles were included in this systematic review, and 13 articles provided necessary quantitative information for meta-analyses. In total, 7759 CHDs were considered across nine different countries. The overall pooled prevalence for PTSD was 17.8% (95% confidence interval [CI] 12.4-24.0%), depression was 28.2% (95% CI 20.7-36.2%), anxiety was 17.2% (95% CI 6.6-31.5%) and hazardous drinking was 17.8% (95% CI 6.9-32.2%). Conclusions: These findings indicate CHDs are at significant risk of mental health problems. Further quantitative and qualitative research is warranted to help understand the psychological risks of working as a CHD and guide appropriate psychological support.

**Piirsalu-Kivihall K and Makiniemi JP. Extent of teleworking and work stress: the role of information and communication technology and job-related demands and resources. *Applied Ergonomics*. 2025; 129:104608.**

<https://doi.org/10.1016/j.apergo.2025.104608>

Abstract: With over 41 million hybrid and high-extent teleworkers in Europe, the landscape of remote work has drastically transformed. Considering the teleworking extent, this study explores the relationships between information and communication technology (ICT) demands, ICT resources, social resources, job demands, and work stress among 1495 Estonian full-time employees engaged in

telework and regular ICT use. Hybrid teleworkers reported higher work stress and ICT demands than high-extent teleworkers. In both groups, high e-communication demands, work requiring concentration, and email challenges were associated with increased work stress. Conversely, job resources such as concentration-enabling workplaces, information sharing and collaboration reduced stress. Hybrid teleworkers experienced elevated stress from ICT difficulties, while high-extent teleworkers were more affected by relationship maintenance. Feeling appreciated was related to lower stress for high-extent teleworkers. Moderation analysis revealed that collaboration and information sharing buffered stress from excessive e-communication only for hybrid teleworkers. Findings offer insights for improving telework practices

**Rudolphi JM, Issa S, Cuthbertson C, and Barnett K. Stress, health, and injury among Illinois farmers. *American Journal of Industrial Medicine*. 2025; 68(9):761-771.**

<https://doi.org/10.1002/ajim.70000>

Abstract: OBJECTIVES: The goal of this cross-sectional study was to characterize stress, injury, and chronic health conditions among agricultural producers in Illinois. The objectives were to: (1) describe the prevalence and nature of work-related injuries; (2) describe chronic health conditions, stress, and symptoms of mental health conditions; and (3) explore relationships between work-related injuries and stress, mental health, and health conditions. METHODS: A cross-sectional survey was conducted using a modified Dillman approach. Agricultural producers received mailed questionnaires assessing demographics, farm characteristics, chronic health conditions, stress (using the PSS questionnaire), anxiety (GAD-7), depression (PHQ-9), and work-related injuries. Descriptive statistics describe the population, farm characteristics, injuries, symptoms of mental health, and chronic health conditions. Chi-squared tests describe associations between variables. RESULTS: Agricultural injuries were reported by 8.01% of respondents, and were primarily minor or moderate. Nearly half (49.07%) reported moderate to high stress, and 10.83% had symptoms of moderate to severe anxiety. No significant associations were found between injury and stress, anxiety, or depression. CONCLUSIONS: These findings highlight the complex interplay between health, stress, and safety in agricultural workers. Longitudinal and qualitative approaches are needed to better understand how stress and chronic conditions may relate to agricultural injuries

**Sterud T, Lunde LK, Berg R, Proper KI, and Aanesen F. Mental health effects of unemployment and re-employment: a systematic review and meta-analysis of longitudinal studies. *Occupational and Environmental Medicine*. 2025; 82(7):343-353.**

<https://doi.org/10.1136/oemed-2025-110194> [open access]

Abstract: This systematic review examined the impact of unemployment and re-employment on mental health problems (depression, anxiety and psychological distress) among working-age adults. We searched MEDLINE, Embase, APA PsycINFO and Web of Science (January 2012-March 2024) and included studies from a prior meta-analysis (1990-2012). Risk of bias was assessed using the Newcastle-Ottawa Scale. We conducted random-effects meta-analyses and narrative synthesis and evaluated the certainty of evidence using Grading of Recommendations Assessment, Development and Evaluation (GRADE). Of 9328 search records, 38 prospective longitudinal studies met the inclusion criteria (27 from 2012-2024 and 11 from 1990-2012). A pooled standardised mean difference (SMD, Cohen's d) of 0.19 (95% CI 0.08 to 0.30,  $I^2=88.7%$ ) indicated increased symptom levels among the unemployed compared with those regularly employed. Similarly, pooled effect estimates indicated

reduced symptoms after re-employment, with a stronger effect observed in between-group difference-in-difference analyses (SMD=-0.27, 95% CI -0.35 to -0.20,  $I^2=40.1\%$ ) than within-group analyses (SMD=-0.19, 95% CI -0.29 to -0.10,  $I^2=84.3\%$ ). The certainty of evidence for all outcomes based on our GRADE evaluation was low. Our systematic review and meta-analysis suggest that unemployment increases the risk of mental health problems, while re-employment may reduce this risk. However, due to the lack of high-certainty evidence, further longitudinal studies with multiple follow-ups are needed to strengthen causal inferences and better clarify mental health trajectories before and after re-employment.

**Stiglbauer B and Penz M. Beyond the resource perspective: integrating appraisal to better understand job autonomy and its effect on well-being. *Journal of Occupational Health Psychology*. 2025; 30(4):227-254.**

<https://doi.org/10.1037/ocp0000403>

Abstract: In occupational health psychology, understanding working conditions has traditionally relied on two approaches: appraisal and structural. While both focus on stressors-differentiating between types (e.g., challenge vs. hindrance vs. threat) and examining their appraisals-the role of appraisal in understanding resources is underexplored. This study therefore investigates job autonomy, a key job resource, through both approaches. Among over 700 German employees who were recruited with the help of an online panel provider, we examined job autonomy and its appraisal as a resource, challenge, hindrance, or threat across four measurement waves spanning 2.5 years. We analyzed cross-sectionally how actual autonomy, combined with individuals' desired levels of autonomy, influenced their appraisals. We also explored longitudinally how both actual autonomy and its appraisals impacted work-related well-being, including job satisfaction, resignation, and cognitive and emotional irritation. Results revealed that higher autonomy was associated with more resource and challenge appraisals, whereas lower autonomy led to more hindrance and threat appraisals. This pattern was particularly evident when actual autonomy levels aligned with desired levels or if desired levels were high. Conversely, a mismatch between actual and desired autonomy reduced the perceived benefit of autonomy. Combining autonomy levels and appraisals enhanced the predictability of well-being outcomes over time, both at the between-person and the within-person level of analysis. In conclusion, this study underscores the importance of integrating appraisal into structural approaches to understanding job resources and advocates for broader consideration of appraisal in future research. (PsycInfo Database Record (c) 2025 APA, all rights reserved)

**Valente B, Severo M, Gerdtham UG, Fraga S, and Araujo J. Education, occupation and income inequalities in obesity among Portuguese women and men: evidence from National Health Surveys (1998-2019). *Social Science & Medicine*. 2025; 384:118541.**

<https://doi.org/10.1016/j.socscimed.2025.118541> [open access]

Abstract: Introduction: This study examined trends in socioeconomic inequalities in obesity among Portuguese women and men using data from National Health Surveys (NHSs). Methods: We analysed weighted data from adults aged 20-64 years from the 1998/1999 (n = 20,581), 2005/2006 (n = 13,088), 2014 (n = 7284), and 2019 (n = 5959) NHSs. Obesity was defined as body mass index (BMI) =30 kg/m<sup>2</sup>, based on self-reported height and weight. Socioeconomic position (SEP) was assessed by education, occupation, and income. Absolute and relative inequalities were measured using the slope index of inequality (SII) and relative index of inequality (RII), derived from log-binomial regression

models. SEP indicators were ranked using RIDIT scores. Models included interactions between RIDIT, sex, and survey year, and were adjusted for age and region. Results: Absolute educational inequalities [SII(95%CI)] widened slightly for both women [1998:-0.182(-0.206; -0.158); 2019:-0.206(-0.281; -0.131)] and men [1998:-0.074(-0.098; -0.050); 2019:-0.121 (-0.193; -0.050)]. Among women, occupation-SII increased until 2005/2006 and then stabilised. Among men, occupation-SII increased steadily, particularly between 2014 and 2019. Income-SII were smaller but evident among women, peaking in 2014 and declining in 2019. Among men, SII-income were less consistent and generally smaller. RII trends mirrored those of SII, with relative inequalities decreasing slightly among women and increasing among men, especially for education and occupation. The gender gap in both absolute and relative inequalities narrowed over time, particularly for occupation. Conclusion: Socioeconomic inequalities in obesity persist, with obesity being disproportionately concentrated among individuals with lower education, income and less differentiated occupations. Overall, women consistently faced greater inequalities than men.

**Wood AJ, Martindale N, and Burchell BJ. Beyond the 'gig economy': towards variable experiences of job quality in platform work. *Work, Employment and Society*. 2025; 39(5):1154-1178.**

<https://doi.org/10.1177/09500170251336947> [open access]

Abstract: The 'gig economy' encompasses a wide range of jobs, platforms and workers. In this article, we provide the first quantitative evidence in support of the model of job quality developed by Wood et al. that predicts divergence across local and remote platform work. Specifically, we find that remote platform work entails significantly better pay, more flexibility, greater influence over how to do the job, a greater sense of doing useful work, better health and safety, less pain, and less work-related insecurity. In contrast, local platform work entails greater organisational influence and less physical isolation. We explain these disparities by considering how divergent organisational forms emerge across the local/remote divide as a result of specific differences in platform technologies and worker skills.

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