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

Cillekens B, Huysmans MA, Holtermann A, van Mechelen W, Straker L, Krause N, et al. Physical activity at work may not be health enhancing. A systematic review with meta-analysis on the association between occupational physical activity and cardiovascular disease mortality covering 23 studies with 655 892 participants. *Scandinavian Journal of Work, Environment & Health*. 2022; 48(2):86-98.

<https://doi.org/10.5271/sjweh.3993> [open access]

Abstract: OBJECTIVES: Emerging evidence suggests contrasting health effects for leisure-time and occupational physical activity. In this systematic review, we synthesized and described the epidemiological evidence regarding the association between occupational physical activity and cardiovascular disease (CVD) mortality. METHODS: A literature search was performed in PubMed, Embase, CINAHL, PsycINFO and Evidence-Based Medicine Reviews, from database inception to 17 April 2020. Articles were included if they described original observational prospective research, assessing the association between occupational physical activity and CVD mortality among adult workers. Reviews were included if they controlled for age and gender and at least one other relevant variable. We performed meta-analyses on the associations between occupational physical activity and CVD mortality. RESULTS: We screened 3345 unique articles, and 31 articles (from 23 studies) were described in this review. In the meta-analysis, occupational physical activity showed no significant association with overall CVD mortality for both males [hazard ratio (HR) 1.00, 95% confidence interval (CI) 0.87-1.15] and females (HR 0.95, 95% CI 0.82-1.09). Additional analysis showed that

higher levels of occupational physical activity were non-significantly associated with a 15% increase in studies reporting on the outcome ischemic heart disease mortality (HR 1.15, 95% CI 0.88-1.49). CONCLUSIONS: While the beneficial association between leisure-time physical activity and CVD mortality has been widely documented, occupational physical activity was not found to have a beneficial association with CVD mortality. This observation may have implications for our appreciation of the association between physical activity and health for workers in physically demanding jobs, as occupational physical activity may not be health enhancing

Delman J and Adams LB. Barriers to and facilitators of vocational development for Black young adults with serious mental illnesses. *Psychiatric Rehabilitation Journal*. 2022; 45(1):1-10.

<https://doi.org/10.1037/prj0000505>

Abstract: OBJECTIVE: Black young adults with serious mental illnesses (SMI) have low rates of employment and school completion. Racial disparities exist in the delivery of vocational services, with Black people less likely to be screened in, and if screened in less likely to receive job training. This qualitative exploratory study examined how Black young adults with SMI perceive the barriers and facilitators to achieving their vocational goals. METHOD: Our conceptual model for this study is the Social-Ecological Model (SEM), which contains four domains of analysis (intrapersonal, interpersonal, community, and societal), informed by Critical Race Theory (CRT). We completed semistructured, qualitative interviews with 28 Black young adults with SMI. We analyzed data using qualitative content and inductive analyses. RESULTS: Numerous respondents were experiencing racial discrimination in their vocational pursuits and their lives overall, and expressed doubts about achieving vocational success in racially imbalanced environments. Facilitating their vocational growth was trusting relationships with nonjudgmental and understanding vocational counselors (VC) who provided supports reflecting client preferences. As college students, respondents benefited from the presence and accessibility of Black faculty and students. As employees, they valued workplace supervisors who provided direct support and feedback. CONCLUSIONS AND IMPLICATIONS FOR PRACTICE: Black young adults with SMI face high and racialized barriers to pursuing work and education at multiple socioecological levels. The field of psychiatric rehabilitation should prepare VCs to understand and address the needs and expressed preferences of Black young adults with SMI. Also called for is research, centered on and directed by Black communities, on the effectiveness of race-conscious vocational practices. (PsyInfo Database Record (c) 2022 APA, all rights reserved)

Ervasti J, Aalto V, Pentti J, Oksanen T, Kivimaki M, and Vahtera J. Association of changes in work due to COVID-19 pandemic with psychosocial work environment and employee health: a cohort study of 24 299 Finnish public sector employees. *Occupational & Environmental Medicine*. 2022; 79(4):233-241.

<https://doi.org/10.1136/oemed-2021-107745> [open access]

Abstract: OBJECTIVES: To examine the associations of COVID-19-related changes in work with perceptions of psychosocial work environment and employee health. METHODS: In a cohort of 24299 Finnish public sector employees, psychosocial work environment and employee well-being were assessed twice before (2016 and 2018=reference period) and once during (2020) the COVID-19 pandemic. Those who reported a change (= 'Exposed') in work due to the pandemic (working from home, new tasks or team reorganisation) were compared with those who did not report such change (= 'Non-exposed'). RESULTS: After adjusting for sex, age, socioeconomic status and lifestyle risk score, working from home (44%) was associated with greater increase in worktime control (standardised mean difference (SMD)(Exposed)=0.078, 95% CI 0.066 to 0.090; SMD(Non-exposed)=0.025, 95% CI 0.014 to 0.036), procedural justice (SMD(Exposed)=0.101, 95% CI 0.084 to 0.118; SMD(Non-exposed)=0.053, 95% CI 0.038 to 0.068), workplace social capital (SMD(Exposed)=0.094, 95% CI 0.077 to 0.110; SMD(Non-exposed)=0.034, 95% CI 0.019 to 0.048), less decline in self-rated health (SMD(Exposed)=-0.038, 95% CI -0.054 to -0.022; SMD(Non-exposed)=-0.081, 95% CI -0.095 to -0.067), perceived work ability (SMD(Exposed)=-0.091, 95% CI -0.108 to -0.074; SMD(Non-exposed)=-0.151, 95% CI -0.167 to -0.136) and less increase in psychological distress (risk ratio (RR)(Exposed)=1.06, 95% CI 1.02 to 1.09; RR(Non-exposed)=1.16, 95% CI 1.13 to 1.20). New tasks (6%) were associated with greater increase in psychological distress (RR(Exposed)=1.28, 95% CI 1.19 to 1.39; RR(Non-exposed)=1.10, 95% CI 1.07 to 1.12) and team reorganisation (5%) with slightly steeper decline in perceived work ability (SMD(Exposed)=-0.151 95% CI -0.203 to -0.098; SMD(Non-exposed)=-0.124, 95% CI -0.136 to -0.112). CONCLUSION: Employees who worked from home during the pandemic had more favourable psychosocial work environment and health, whereas those who were exposed to work task changes and team reorganisations experienced more adverse changes

Feijo FR, Pearce N, Faria NMX, Carvalho MP, Szortyka ALSC, Oliveira PAB, et al. The role of workplace bullying in low back pain: a study with civil servants from a middle-income country. Journal of Pain. 2022; 23(3):459-471.

<https://doi.org/10.1016/j.jpain.2021.09.008>

Abstract: This is a cross-sectional study that analysed the association between workplace bullying and LBP. The participants were 894 judicial civil servants from Porto Alegre, southern Brazil. Workplace Bullying was measured by the Negative Acts Questionnaire (NAQ-r) and Low Back Pain by the Nordic Questionnaire for Musculoskeletal Symptoms (NQMS). Logistic Regression was used to analyse data and test hypotheses. The prevalence of LBP in the last 7 days was 50.1%, while the overall prevalence of Chronic LBP was 19.3%. Some psychosocial factors at work were strongly associated with both outcomes. Workplace bullying was strongly associated with LBP, even after adjustment for several covariates. The odds of LBP in the last 7 days among bullied workers was 1.89 (95% CI: 1.31-2.71) times higher, compared to non-bullied. Workplace bullying was also associated with chronic LBP after adjustment for sociodemographic, behavioural and some occupational factors (OR = 1.60; 95% CI: 1.05-2.44). Psychosocial factors at work, and particularly workplace bullying, were strong risk factors for

LBP, in contrast to most individual factors, and dose-response patterns were showed. Positive associations between bullying and LBP raise hypotheses on causation, and the role of psychosocial factors at work are discussed. Further longitudinal studies should address these hypotheses, investigating causal paths, mechanisms and possible mediation. PERSPECTIVES: As a psychosocial risk, workplace bullying may play a role in low back pain and can be focus of interventions to prevent LBP. Dose-response patterns on the association between workplace bullying and low back pain are discussed and hypotheses are raised. The paper addresses different ways of measuring and categorising bullying at work, in order to study the relationship between bullying and pain.

Fried KW and DeLeo PC. Demonstrating the protective effect of a 70-year-old occupational exposure limit against pneumoconiosis caused by mica. *Toxicology and Industrial Health*. 2022; 38(2):63-69.

<https://doi.org/10.1177/07482337211062281> [open access]

Abstract: Workers involved in crushing, milling, screening, and bagging of mica scrap are at increased risk to develop pneumoconiosis, a progressive material overloading of the lung that can lead to fibrosis and, in the later stages, to dyspnea. Pneumoconiosis is only seen after 10-20 years of respiratory mica exposure, and it can have a latency period of up to 40 years-today's cases date back to exposures during the second half of the 20th century. An occupational lifetime exposure level of 3 mg/m³ respirable mica dust has been considered to present no risk of pneumoconiosis since 1951 when the American Conference of Governmental Industrial Hygienists (ACGIH) established a 20 million particles per cubic foot (mppcf) (3.5 mg/m³ respirable particles) exposure limit. As a result, numbers of unspecified and other pneumoconioses in the United States have steadily declined since the early 1970s. Data from the National Institute for Occupational Safety and Health documents a 91% decrease between 1972 and 2014 (i.e., the peak of documented cases and the latest reported data) for combined cases of aluminosis, berylliosis, stannosis, siderosis, and fibrosis from production and use of bauxite, graphite fibers, wollastonite, cadmium, Portland cement, emery, kaolin, antimony, and mica. Ample evidence indicates that the 70-year-old occupational lifetime exposure level of 3 mg/m³ respirable mica dust is protective of workers' health.

Gu J and Guo F. How fatigue affects the safety behaviour intentions of construction workers: an empirical study in Hunan, China. *Safety Science*. 2022; 149:105684.

<https://doi.org/10.1016/j.ssci.2022.105684>

Hittle BM, Norrell RM, Omololu SO, and Gresham-Ulrich M. Retirement center worker sleep health assessment during the COVID-19 pandemic. *Workplace Health & Safety*. 2022; [epub ahead of print].

<https://doi.org/10.1177/21650799211054863>

Abstract: BACKGROUND: Sleep health disturbances can increase risks for workplace injury,

error, and poor worker health. Essential workers have reported sleep disturbances since the COVID-19 pandemic onset, which may jeopardize their health and safety. The aims of this project were to assess sleep health among Continuing Care Retirement Community (CCRC) workers, examine potential differences between worker types, and describe the self-perceived impact of COVID-19 on workers' workload and sleep. METHODS: Through an academic-practice partnership, this needs assessment used a cross-sectional design that collected self-report data during fall 2020 from CCRC workers. Guided by the Workplace Health Model, survey questions included work characteristics, sleep health, and COVID-19 impact on sleep and workload. FINDINGS: Ninety-four respondents completed the survey across multiple departments. Respondents (n = 34, 36.2%) reported sleeping below recommended hours on workdays. The majority scored above the population mean on Patient-Reported Outcomes Measurement (PROMIS) measures of sleep disturbance (n = 52, 55.3%), sleep-related impairment (n = 49, 52.1%), and fatigue (n = 49, 52.1%). Differences in workday total sleep time and fatigue were noted among shift workers versus nonshift workers, with shift workers reporting less sleep and more fatigue. Shorter sleep duration was noted among respondents working shifts 10 or more hours compared with those working 8 hours. Pandemic-related workload increase was reported by 22.3% (n = 21) of respondents, with 17% (n = 16) noting more than one type of workload change. Since COVID-19 onset, 36.2% (n = 34) reported no sleep changes and 35.1% (n = 33) reported sleeping less. A medium, positive relationship was found between increased changes in work due to COVID-19 and increased difficulties sleeping ($r = .41$, $n = 73$, $p = .000$). CONCLUSION/APPLICATION TO PRACTICE: Proper sleep health is essential to workplace safety and worker health. By assessing sleep health during a crisis, occupational health nurses can identify opportunities to support worker health and safety, through sleep education, monitoring for sleepiness and fatigue, ensuring countermeasures are available (e.g., caffeine), and assessing for opportunities to change organizational policies

Howe EI, Andelic N, Fure SCR, Roe C, Soberg HL, Hellstrom T, et al. Cost-effectiveness analysis of combined cognitive and vocational rehabilitation in patients with mild-to-moderate TBI: results from a randomized controlled trial. BMC Health Services Research. 2022; 22(1):185.

<https://doi.org/10.1186/s12913-022-07585-3> [open access]

Abstract: Background: Traumatic brain injury (TBI) represents a financial burden to the healthcare system, patients, their families and society. Rehabilitation interventions with the potential for reducing costs associated with TBI are demanded. This study evaluated the cost-effectiveness of a randomized, controlled, parallel group trial that compared the effectiveness of a combined cognitive and vocational intervention to treatment as usual (TAU) on vocational outcomes. Methods: One-hundred sixteen participants with mild-to-moderate TBI were recruited from an outpatient clinic at Oslo University Hospital, Norway. They were randomized to a cognitive rehabilitation intervention (Compensatory Cognitive Training, CCT) and Supported Employment (SE) or TAU in a 1:1 ratio. Costs of CCT-SE and

TAU, healthcare services, informal care and productivity loss were assessed 3, 6 and 12 months after study inclusion. Cost-effectiveness was evaluated from the difference in number of days until return to pre-injury work levels between CCT-SE and TAU and quality-adjusted life years (QALYs) derived from the EQ-5D-5L across 12 months follow-up. Cost-utility was expressed in incremental cost-effectiveness ratio (ICER). Results: The mean total costs of healthcare services was € 3,281 in the CCT-SE group and € 2,300 in TAU, informal care was € 2,761 in CCT-SE and € 3,591 in TAU, and productivity loss was € 30,738 in CCT-SE and € 33,401 in TAU. Costs related to productivity loss accounted for 84% of the total costs. From a healthcare perspective, the ICER was € 56 per day earlier back to work in the CCT-SE group. Given a threshold of € 27,500 per QALY gained, adjusting for baseline difference in EQ-5D-5L index values revealed a net monetary benefit (NMB) of € -561 ($0.009 \times 27,500 - 979$) from the healthcare perspective, indicating higher incremental costs for the CCT-SE group. From the societal perspective, the NMB was € 1,566 ($0.009 \times 27,500 - (-1,319)$), indicating that the CCT-SE intervention was a cost-effective alternative to TAU. Conclusions: Costs associated with productivity loss accounted for the majority of costs in both groups and were lower in the CCT-SE group. The CCT-SE intervention was a cost-effective alternative to TAU when considering the societal perspective, but not from a healthcare perspective.

Hulls PM, Richmond RC, Martin RM, Chavez-Ugalde Y, and de Vocht F. Workplace interventions that aim to improve employee health and well-being in male-dominated industries: a systematic review. *Occupational & Environmental Medicine*. 2022; 79(2):77-87.

<https://doi.org/10.1136/oemed-2020-107314> [open access]

Abstract: The published evidence on whether workplace health and well-being interventions are as effective in male-dominated industries compared with mixed-gender environments has not been synthesised. We performed a systematic review of workplace interventions aimed at improving employee health and well-being in male-dominated industries. We searched Web of Knowledge, PubMed, Medline, Cochrane Database and Web of Science for articles describing workplace interventions in male-dominated industries that address employee health and well-being. The primary outcome was to determine the effectiveness of the intervention and the process evaluation (intervention delivery and adherence). To assess the quality of evidence, Cochrane Collaboration's Risk of Bias Tool was used. Due to the heterogeneity of reported outcomes, meta-analysis was performed for only some outcomes and a narrative synthesis with albatross plots was presented. After full-text screening, 35 studies met the eligibility criteria. Thirty-two studies delivered the intervention face-to-face, while two were delivered via internet and one using postal mail. Intervention adherence ranged from 50% to 97%, dependent on mode of delivery and industry. 17 studies were considered low risk of bias. Albatross plots indicated some evidence of positive associations, particularly for interventions focusing on musculoskeletal disorders. There was little evidence of intervention effect on body mass index and systolic or diastolic blood pressure. Limited to moderate evidence of beneficial effects was found for workplace health and well-being

interventions conducted within male-dominated industries. Such interventions in the workplace can be effective, despite a different culture in male-dominated compared with mixed industries, but are dependent on delivery, industry and outcome. CRD42019161283

Knardahl S and Christensen JO. Working at home and expectations of being available: effects on perceived work environment, turnover intentions, and health. *Scandinavian Journal of Work, Environment & Health*. 2022; 48(2):99-108.

<https://doi.org/10.5271/sjweh.3996>

Abstract: OBJECTIVES: The aim of this study was to determine if (i) working at home and (ii) expectations of being available to the employer in their spare time influences employees' perceptions of their work environment and well-being, health, organizational commitment, or intention to leave. METHODS: We conducted cross-sectional analyses of survey data from 7861 office workers reporting hours worked at home and 3146 reporting frequency of expectations of being available to the employer in spare time (availability expectations). Prospective analyses (two-year follow up) comprised 5258 and 2082, respectively. Dependent variables were work factors previously associated with health complaints, mental distress, positive affect, work-private life conflict, commitment, and intention to leave. Random intercept linear and logistic regressions controlled for time worked (in addition to regular hours), age, gender, and skill level. RESULTS: "Hours working at home" was cross-sectionally associated with higher levels of demands, role ambiguity, role conflicts, decision control, empowering leadership, human resource primacy, commitment, work-private life conflict, and lower support from co-workers. "Availability expectations" was associated with higher levels of demands, role conflicts, neck pain, mental distress, thinking that work was not finished when going to bed, sleep problems, work-private life conflict, intentions to leave and with lower levels of superior support, co-worker support, fair leadership, and commitment. There were no prospective associations. CONCLUSIONS: Working at home was associated with both positive and negative factors. Specific factors pertaining to role expectations and support from co-workers pose challenges. Availability expectations was associated with potentially negative work factors and health, organizational commitment, and intentions to leave. There were no long-term effects

Lee T, Roy A, Power P, Sembajwe G, and Dropkin J. Ergonomic exposures and control measures associated with mass fatality decedent handling in morgues and body collection points in a New York healthcare system during COVID-19: a case series. *International Journal of Industrial Ergonomics*. 2022; 88:103260.

<https://doi.org/10.1016/j.ergon.2022.103260> [open access]

Abstract: INTRODUCTION: In April 2020, novel coronavirus SARS-CoV-2 (COVID-19) produced an ongoing mass fatality event in New York. This overwhelmed hospital morgues necessitating emergent expansion of capacity in the form of refrigerated trucks, trailers, and shipping containers referred to as body collection points (BCPs). The risks for musculoskeletal injury during routine and mass fatality mortuary operations and experiences of decedent

handlers throughout the "first wave" of COVID-19 are presented along with mitigation strategies. METHODS: Awareness of the high rates of musculoskeletal injury among health care workers due to ergonomic exposures from patient handling, including heavy and repetitive manual lifting, prompted safety walkthroughs of mortuary operations at multiple hospitals within a health system in New York State by workforce safety specialists. Site visits sought to identify ergonomic exposures and ameliorate risk for injury associated with decedent handling by implementing engineering, work practice, and administrative controls. RESULTS: Musculoskeletal exposures included manual lifting of decedents to high and low surfaces, non-neutral postures, maneuvering of heavy equipment, and push/pull forces associated with the transport of decedents. DISCUSSION: Risk mitigation strategies through participatory ergonomics, education on body mechanics, development of novel handling techniques implementing friction-reducing aides, procurement of specialized equipment, optimizing BCP design, and facilitation of communication between hospital and system-wide departments are presented along with lessons learned. After-action review of health system workers' compensation data found over four thousand lost workdays due to decedent handling related incidents, which illuminates the magnitude of musculoskeletal injury risk to decedent handlers

Lerche AF, Mathiassen SE, Rasmussen CL, Straker L, Sogaard K, and Holtermann A. Designing industrial work to be 'just right' to promote health: a study protocol for a goldilocks work intervention. BMC Public Health. 2022; 22(1):381.

<https://doi.org/10.1186/s12889-022-12643-w> [open access]

Abstract: Background: The Goldilocks Work Principle expresses that productive work should be designed to promote workers' health. We recently showed that it is feasible to develop and implement modifications to productive work that change physical behaviors (i.e. sitting, standing and being active) in a direction that may promote health among industrial workers. Therefore, the aim of the present study is to conduct a cluster randomised controlled trial investigating health effects of implementing the Goldilocks Work intervention among industrial workers. Methods: Our implementation plan consists of educating work teams, organizing implementation meetings, and providing feedback to workers. Three meetings with a preselected local workplace group will be scheduled. The first meeting educates the group to use a planning tool by which work can be planned to have 'just right' physical behaviors. The second and third meetings will focus on supporting implementation of the tool in daily work. An expected 28 clusters of work teams across two participating production sites will be randomized to either intervention or control group. Data collection will consist of 1) questionnaires regarding work and musculoskeletal health, 2) wearable sensor measurements of the physical behavior, and 3) assessment of general health indicators, including BMI, blood pressure, and fat percentage. The primary outcome is musculoskeletal health, measured by low back pain intensity, and secondary outcomes are 1) physical behaviors at work, 2) accumulated time in long bouts of sitting, standing, and being active and 3) perceived fatigue and energy during work. Furthermore, implementation and cost of

the intervention will be evaluated based on questionnaires and data from the planning tool completed by the workers. Discussion: This study will evaluate the effectiveness and implementation of a 12 - weeks Goldilocks Work intervention with the aim of improving musculoskeletal health among industrial workers. The cluster randomized controlled study design and the evaluation of the implementation, results and costs of the intervention will make it capable of contributing with valuable evidence of how productive work may be designed to promote industrial workers' health. Trial registration: Clinical trial registration was assigned 10-09-2021 (ISRCTN80969503). <https://doi.org/10.1186/ISRCTN80969503>.

MacLean KFE, Neyedli HF, Dewis C, and Frayne RJ. The role of at home workstation ergonomics and gender on musculoskeletal pain. *Work*. 2022; 71(2):309-318.

<https://doi.org/10.3233/WOR-210692>

Abstract: BACKGROUND: The recent mandate for university faculty and staff to work-from-home (WFH) during the COVID-19 pandemic has forced employees to work with sub-optimal ergonomic workstations that may change their musculoskeletal discomfort and pain. As women report more work-related musculoskeletal discomfort (WMSD), this effect may be exacerbated in women. OBJECTIVE: The purpose of this study was to describe university employee at-home office workstations, and explore if at-home workstation design mediates the effect of gender on musculoskeletal pain. METHODS: University employees completed a survey that focused on the WFH environment, at home workstation design and musculoskeletal pain. Descriptive statistics and regression analysis were used to analyze the responses. RESULTS: 61% of respondents reported an increase in musculoskeletal pain, with the neck, shoulders and lower back being reported most frequently. Women reported significantly greater musculoskeletal pain, but this relationship was significantly mediated by poor ergonomic design of the home workstation. Improper seat-height and monitor distance were statistically associated with total-body WMSD. CONCLUSIONS: WFH has worsened employee musculoskeletal health and the ergonomic gap between women and men in the workspace has persisted in the WFH environment, with seat height and monitor distance being identified as significant predictors of discomfort/pain

Nielsen ML, Laursen CS, and Dyreborg J. Who takes care of safety and health among young workers? Responsibilization of OSH in the platform economy. *Safety Science*. 2022; 149:105674.

<https://doi.org/10.1016/j.ssci.2022.105674>

Runstrom EG, Tinnerberg H, Rosell L, Moller R, Almstrand AC, and Bredberg A. Exploring methods for surveillance of occupational exposure from additive manufacturing in four different industrial facilities. *Annals of Work Exposures and Health*. 2022; 66(2):163-177.

<https://doi.org/10.1093/annweh/wxab070> [open access]

Abstract: 3D printing, a type of additive manufacturing (AM), is a rapidly expanding field. Some adverse health effects have been associated with exposure to printing emissions, which

makes occupational exposure studies important. There is a lack of exposure studies, particularly from printing methods other than material extrusion (ME). The presented study aimed to evaluate measurement methods for exposure assessment in AM environments and to measure exposure and emissions from four different printing methods [powder bed fusion (PBF), material extrusion (ME), material jetting (MJ), and vat photopolymerization] in industry. Structured exposure diaries and volatile organic compound (VOC) sensors were used over a 5-day working week. Personal and stationary VOC samples and real-time particle measurements were taken for 1 day per facility. Personal inhalable and respirable dust samples were taken during PBF and MJ AM. The use of structured exposure diaries in combination with measurement data revealed that comparatively little time is spent on actual printing and the main exposure comes from post-processing tasks. VOC and particle instruments that log for a longer period are a useful tool as they facilitate the identification of work tasks with high emissions, highlight the importance of ventilation and give a more gathered view of variations in exposure. No alarming levels of VOCs or dust were detected during print nor post-processing in these facilities as adequate preventive measures were installed. As there are a few studies reporting negative health effects, it is still important to keep the exposure as low as reasonable

Sikora A, Schneider G, Wegewitz U, and Bultmann U. Employees receiving inpatient treatment for common mental disorders in Germany: factors associated with time to first and full return to work. *Journal of Occupational Rehabilitation*. 2022; 32(1):114-127.

<https://doi.org/10.1007/s10926-021-09985-4> [open access]

Abstract: Purpose In Germany, return to work (RTW) after inpatient treatment for common mental disorders (CMDs) is a complex process at the intersection of the mental healthcare system and the workplace. This study examined (1) the time to first and full RTW and (2) associated factors among employees receiving inpatient treatment for CMDs. Methods In this prospective cohort study, employees receiving inpatient psychiatric or medical rehabilitation treatment for CMDs were interviewed by phone during their last week before discharge. Follow-up interviews were conducted after 6, 12, and 18 months. Health-, personal, and work-related factors were used from baseline measurement. Parametric survival analysis was conducted to identify factors associated with time to first and full RTW. Results A total of N = 269 participants who stayed at a psychiatric clinic or a medical rehabilitation facility were included. Almost all participants (n = 252, 94%) from both treatment settings reported a first RTW and a full RTW. The time to first and full RTW was shortest among participants from medical rehabilitation (both median 6 days) and longer among participants from psychiatric treatment (median 17 days to first RTW and 73 days to full RTW). While only health-related and personal factors were associated with time to first RTW, leadership quality and needed individual RTW support were associated with time to full RTW. Conclusions More attention to work accommodation needs for RTW in clinical practice and coordinated actions towards

RTW in collaboration with key RTW stakeholders in the workplace may support a timely RTW. Clinical Registration Number DRKS00010903, retrospectively registered.

Werneck AO, Kandola A, Barboza LL, Araujo RHO, Szwarcwald CL, Stubbs B, et al. Does stressful workplace characteristics moderate or confound the association between occupational physical activity and elevated depressive symptoms? A large study including 36,442 adults. Journal of Affective Disorders. 2022; 303:196-202.

<https://doi.org/10.1016/j.jad.2022.02.018>

Abstract: Background: We tested whether stressful workplace characteristics confound or moderate the association between occupational physical activity and depressive symptoms. Method: We used data of 36,442 employed adults (16,992 women), with a mean age of 39.3 ± 12.6y, from the 2013 Brazilian National Health Survey. Depressive symptoms were assessed through the Patient Health Questionnaire-9 (cut-point: ≥10). Occupational physical activity was self-reported and classified using the cut-point of 150 min/week and the highest quintile. Ten stressful workplace characteristics (e.g. exposure to stress, noise, violence) were also self-reported dichotomously. Logistic regression models were used considering the adjustment for potential confounders. Results: Most of the stressful workplace characteristics were associated with elevated depressive symptoms (8/10 characteristics) and higher occupational physical activity (9/10 characteristics). Although there were no interactions in combined associations, we found that the association between occupational physical activity and depressive symptoms consistently reduced after adjusting for the cluster of positive screening for at least two stressful workplace characteristics in men [highest quintile: OR_{unadjusted}: 1.63 (95%CI 1.22-2.17) vs OR_{adjusted}: 1.36 (1.08-1.91); ≥150 min/week: OR_{unadjusted}: 1.43 (1.09-1.88) vs OR_{adjusted}: 1.25 (0.95-1.64)], and women [highest quintile: OR_{unadjusted}: 2.15 (1.73-2.66) vs OR_{adjusted}: 1.83 (1.47-2.29); ≥150 min/week: OR_{unadjusted}: 2.11 (1.68-2.65) vs OR_{adjusted}: 1.80 (1.42-2.27)]. Limitations: The cross-sectional design limits the causal inference. Conclusions: Stressful workplace characteristics did not moderate, but acted as confounders in the association between occupational physical activity and elevated depressive symptoms and should be considered in future studies.

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