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August 31, 2018

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Aerts BR, Kuijer PP, Beumer A, Eygendaal D, and Frings-Dresen MH. Work-related questionnaire for upper extremity disorders (WORQ-UP): factor analysis and internal consistency. *Archives of Physical Medicine & Rehabilitation*. 2018; 99(9):1818-1826.

<http://dx.doi.org/10.1016/j.apmr.2018.03.013>

Abstract: OBJECTIVE: To test a 17-item questionnaire, the Work-Related Questionnaire for Upper extremity disorders (WORQ-UP), for dimensionality of the items (factor analysis) and internal consistency. DESIGN: Cross-sectional study. SETTING: Outpatient clinic. PARTICIPANTS: A consecutive sample of patients (N=150) consisting of all new referral patients (either from a general physician or other hospital) who visited the orthopedic outpatient clinic because of an upper extremity musculoskeletal disorder. INTERVENTIONS: Not applicable. MAIN OUTCOME MEASURES: Number and dimensionality of the factors in the WORQ-UP. RESULTS: Four factors with eigenvalues (EVs) >1.0 were found. The factors were named exertion, dexterity, tools & equipment, and mobility. The EVs of the factors were, respectively, 5.78, 2.38, 1.81, and 1.24. The factors together explained 65.9% of the variance. The Cronbach alpha values for these factors were, respectively, .88, .74, .87, and .66. CONCLUSIONS: The 17 items of the WORQ-UP resemble 4 factors-exertion, dexterity, tools & equipment, and mobility-with a good internal consistency

Al-Bayati AJ, Abudayyeh O, and Albert A. Managing active cultural differences in U.S. construction workplaces: perspectives from non-Hispanic workers. *Journal of Safety Research*. 2018; 66:1-8.

<http://dx.doi.org/10.1016/j.jsr.2018.05.004>

Abstract: INTRODUCTION: Current census reports indicate a growing shift

toward workforce diversity in the U.S. construction industry, which is largely the result of increasing participation from the Hispanic community. The data also suggest that the Hispanic workforce suffers a higher rate of fatal injuries compared to their non-Hispanic counterparts. Therefore, there is a dire need to develop and utilize new management tools and strategies to accommodate the differences in language and culture of this incoming labor force. **METHOD:** The absence of these tools and strategies poses several challenges including cost overrun, schedule delay, and more importantly, higher workplace injury rates. This study aims to provide a better understanding of the contribution of cultural diversity as a factor that may influence the overall site safety. **RESULTS:** As a result, this study provides further evidence that indicate that the current findings regarding the influence of active cultural differences are reliable, valid, and needs attention. Furthermore, the study provides sub-analysis results of cultural values among Hispanic workers, which suggest that workers from Mexico are less likely to speak up on safety issues when compared to other Hispanic workers. Therefore, this study has both practical and theoretical implications for managing workforce diversity and related safety performance in the U.S. construction industry. The results of the study can be used by employers and managers to adopt responsive strategies and tools to reduce the likelihood of fatal and nonfatal injuries among Hispanic workers

Bell N, Evans G, Beswick A, and Moore A. Summary of the evidence on the effectiveness of mental health first aid (MHFA) training in the workplace. Report No. RR1135. 2018. Buxton, Derbyshire, UK: Health and Safety Executive (HSE).

<http://www.hse.gov.uk/research/rrhtm/rr1135.htm>

Bouwhuis S, de Wind A, De Kruif A, Geuskens GA, van der Beek AJ, Bongers PM, and Boot CRL. Experiences with multiple job holding: a qualitative study among Dutch older workers. BMC Public Health. 2018; 18(1):1054.

<http://dx.doi.org/10.1186/s12889-018-5841-7> [open access]

Abstract: BACKGROUND: Multiple job holding (MJH) is a common and growing phenomenon in many countries. Little is known about experiences with MJH among older workers. The objective of the present study is to gain insight in experiences with MJH among Dutch workers aged 45 years and older.

METHODS: Multiple job holders were selected from the Study on Transitions in Employment, Ability, and Motivation (STREAM), a Dutch cohort study among persons aged 45 years and older. Purposive sampling was applied to assure heterogeneity regarding gender, educational level, health, financial situation, willingness to continue MJH, and type of MJH (only jobs as employee or also being self-employed). Interviews were conducted until data saturation occurred. Fifteen multiple job holders participated in this study (eight men, seven women). Interviews were digitally recorded, transcribed verbatim and analyzed, along with field notes, using thematic content analysis. The data were openly coded, after

which codes were aggregated into themes, which formed a thematic map. In each phase of the analysis at least two researchers were involved to increase reliability. RESULTS: Experiences with MJH varied from positive to negative. They were influenced by characteristics of individual jobs, e.g. social support at work, as well as characteristics of the combination of jobs, e.g. positive spill-over effects, and conflicts between work schedules. The personal context of multiple job holders, e.g. their age, or reason for MJH, affected how work characteristics influenced experiences. Negative experiences with one job often coincided with negative experience in the other job(s), and problems in the personal context. Some multiple job holders were able to make changes to their situation when desired. For some, this was not possible, which augmented their negative experience. CONCLUSIONS: This study adds to existing knowledge that experiences with MJH are not only influenced by work characteristics but also by the personal context of multiple job holders, and that some workers are able to change their situation when desired, while others are not. Future research should study how different combinations of work and personal characteristics influence sustainable employability of multiple job holders. Policies facilitating life-long learning could increase opportunities to change the MJH situation when desired

Charles LE, Ma CC, Burchfiel CM, and Dong RG. Vibration and ergonomic exposures associated with musculoskeletal disorders of the shoulder and neck. *Safety and Health at Work*. 2018; 9(2):125-132.

<http://dx.doi.org/10.1016/j.shaw.2017.10.003> [open access]

Abstract: Background: According to the US Bureau of Labor Statistics, musculoskeletal disorders (MSDs) accounted for 32% of all nonfatal injury and illness cases in 2014 among full-time workers. Our objective was to review and summarize the evidence linking occupational exposures to vibration and awkward posture with MSDs of the shoulder and neck. Methods: A literature search was conducted using the terms musculoskeletal disorders, vibration, and awkward posture. All types of observational epidemiologic studies, with the exception of case reports, published during 1998-2015 were included. Databases searched were MEDLINE (Ovid), Embase (Ovid), Scopus, Ergonomic Abstracts, NIOSHTIC-2, and Health and Safety Science Abstracts. Results: Occupational exposures to whole-body or hand-arm vibration were significantly associated with or resulted in MSDs of the shoulder and neck. Awkward postures while working were also associated with MSDs in these locations. These findings were consistent across study designs, populations, and countries. Conclusion: Occupational exposure to vibration and awkward posture are associated with shoulder and neck MSDs. Longitudinal studies are required to elucidate the mechanisms responsible for these associations, and intervention studies are warranted

Duru P, Ocaktan ME, Celen U, and Orsal O. The effect of workplace bullying perception on psychological symptoms: a structural equation approach. *Safety and Health at Work*. 2018; 9(2):210-215.

<http://dx.doi.org/10.1016/j.shaw.2017.06.010> [open access]

Abstract: Background: The aims of this study were to determine the extent of workplace bullying perceptions among the employees of a Faculty of Medicine, evaluating the variables considered to be associated, and determining the effect of workplace bullying perceptions on their psychological symptoms evaluated by the Brief Symptom Inventory (BSI). Methods: This cross-sectional study was performed involving 355 (88.75%) employees. Results: Levels of perceived workplace bullying were found to increase with the increasing scores for BSI and BSI sub-dimensions of anxiety, depression, negative self, somatization, and hostility (all $p < 0.001$). One point increase in the workplace bullying perception score was associated with a 0.47 point increase in psychological symptoms evaluated by BSI. Moreover, the workplace bullying perception scores were most strongly affected by the scores of anxiety, negative self, depression, hostility, and somatization (all $p < 0.05$). Conclusion: The present results revealed that young individuals, divorced individuals, faculty members, and individuals with a chronic disease had the greatest workplace bullying perceptions with our study population. Additionally, the BSI, anxiety, depression, negative self, somatization, and hostility scores of the individuals with high levels of workplace bullying perceptions were also high

Johnson S, Regnaud JP, Marck A, Berthelot G, Ungureanu J, and Toussaint JF. Understanding how outcomes are measured in workplace physical activity interventions: a scoping review. BMC Public Health. 2018; 18(1):1064.

<http://dx.doi.org/10.1186/s12889-018-5980-x> [open access]

Abstract: BACKGROUND: An inverse relationship exists between physical activity and many non-communicable diseases, such as obesity. Given the daily time spent, a logical domain to reach an adult population for intervention is within and around the workplace. Many government bodies, including the World Health Organization (WHO), include worksite health promotions (WHPs) targeted at increasing physical activity as a public health intervention. The aim of this scoping review was to determine what was measured (outcomes) and how they were measured (evaluation tools) during workplace physical activity interventions in order to identify gaps and implications for policies and practice. METHODS: A scoping review was executed in April 2017 via PubMed, SPORTDiscus, EBSCOhost and the Cochrane Library. This search included articles published between January 2008 to February 2017 in order to coincide with the WHO's Global Plan of Action on Worker's Health. Extracted information was arranged into data collection grids. Cross-analysis of measured outcomes with their corresponding evaluation tools was completed. A quality assessment based on study design was executed. RESULTS: Identification of 732 records was made and ultimately 20 studies and reviews that met criteria were selected. Researchers themed 9 primary measured outcomes. Studies utilized various forms of both objective and subjective evaluation methods. Three primary evaluation methods were categorized: biologic, electronic and declarative tools.

The researchers discovered 92 unique tools: 27 objective and 65 subjective, within these parameters. **CONCLUSION:** Study quality, measurement tools and data collection were heterogeneous making analysis of effect comparisons problematic and unreliable. Much of the published research does not employ robust statistical analysis making effects difficult to ascertain. Considering the variety of both measured outcomes and evaluation tools, only educated inferences can be made as to the effectiveness and efficiency of WHPs. More standardized measurement practices are therefore suggested for assessment efficiency

Kim WH and Nam JKN. Corporations may hire more people with disabilities through public employment support services: propensity score matching analysis. Rehabilitation Counseling Bulletin. 2018; [Epub ahead of print]. <http://dx.doi.org/10.1177/0034355218793980>

Kim KW, Lim HC, Park JH, Park SG, Park YJ, and Cho HH. Developing a basic scale for workers' psychological burden from the perspective of occupational safety and health. Safety and Health at Work. 2018; 9(2):224-231.

<http://dx.doi.org/10.1016/j.shaw.2018.02.004> [open access]

Abstract: Background: Organizations are pursuing complex and diverse aims to generate higher profits. Many workers experience high work intensity such as workload and work pressure in this organizational environment. Especially, psychological burden is a commonly used term in workplace of Republic of Korea. This study focused on defining the psychological burden from the perspective of occupational safety and health and tried to develop a scale for psychological burden. **Methods:** The 48 preliminary questionnaire items for psychological burden were prepared by a focus group interview with 16 workers through the Copenhagen Psychosocial Questionnaire II and Mindful Awareness Attention Scale. The preliminary items were surveyed with 572 workers, and exploratory factor analysis, confirmatory factor analysis, and correlation analysis were conducted for a new scale. **Results:** As a result of the exploratory factor analysis, five factors were extracted: organizational activity, human error, safety and health workload, work attitude, and negative self-management. These factors had significant correlations and reliability, and the stability of the model for validity was confirmed using confirmatory factor analysis. **Conclusion:** The developed scale for psychological burden can measure workers' psychological burden in relation to safety and health. Despite some limitations, this study has applicability in the workplace, given the relatively small-sized questionnaire

Michel C, Guene V, Michon E, Roquelaure Y, and Petit A. Return to work after rehabilitation in chronic low back pain workers. Does the interprofessional collaboration work? Journal of Interprofessional Care. 2018; 32(4):521-524.

<http://dx.doi.org/10.1080/13561820.2018.1450231>

Abstract: The objective of this study was to assess the workplace information collected and shared between professionals of the centers and occupational health professionals during functional restoration programs intended to chronic low back pain patients. A descriptive study carried out by a questionnaire sent to the French rehabilitation centers offering a functional restoration program. Data collection focused on the kinds of professionals involved in programs, professionals who approach work issues, work analysis, social and occupational information collected, existence of a specific work rehabilitation program, frequency of and methods for sharing information with occupational health professionals. Occupational information was mostly collected at inclusion during an individual interview by the rehabilitation physicians, social workers, and occupational therapists. Workplace environment was the most poorly discussed aspect. A minority of centers adapted their programs regarding these information. Information sharing with occupational physicians was mostly through the patient and was influenced by the presence of an ergonomist or of an occupational physician in the team. The study found poor interest about work environment and that the cooperation between practitioners in disability management remains limited. The various practitioners' cultures and interests may be a brake on cooperation and exchange of information

Middleton N, Andreou P, Karanikola M, Kouta C, Kolokotroni O, and Papastavrou E. Investigation into the metric properties of the workplace social capital questionnaire and its association with self-rated health and psychological distress amongst Greek-Cypriot registered nurses: cross-sectional descriptive study. BMC Public Health. 2018; 18(1):1061.

<http://dx.doi.org/10.1186/s12889-018-5959-7> [open access]

Abstract: BACKGROUND: Social capital can be described as an individual or a collective attribute, with structural and cognitive components, and a bonding, bridging and linking typology. While extensively studied in the community, studies in occupational settings are sparse by comparison. Furthermore, there is no uniformity in its measurement. This study investigated the construct validity of a Workplace Social Capital questionnaire (WSC), originally developed in the Finnish Public Sector occupational cohort, in a different socio-cultural setting (Cyprus), language (Greek) and occupational group (Registered Nurses). It also explored its criterion concurrent validity according to observed association with self-rated health and psychological distress. METHODS: Participants were 10% of all registered nurses (N = 362) who responded to the 8-item WSC scale during a nationwide educational programme. A unidimensional model was compared with the postulated two-factor (structural vs cognitive) and three-factor model (bonding, bridging, linking) in Confirmatory Factor Analyses. The association with self-rated health (0-100 Visual Analogue Scale) and mental distress (GHQ-12 \geq 4) was assessed in linear and logistic regression models. RESULTS: A bonding (Cronbach's α = 0.76), bridging (α = 0.78) and linking (α = 0.89) structure explained 77.6% of the variance and was a better fit as indicated by goodness of fit indices. Elevated odds of mental distress and poorer self-rated health were

observed among participants with the lowest levels of perceived workplace social capital. In adjusted models, associations appeared stronger with bonding social capital (adjOR of mental distress = 2.71 95% CI = 1.08, 6.79) while those with the highest scores rated their health higher by 8.0 points on average (95% CI = 2.1, 13.8). Low linking social capital was also associated with poorer health but no consistent associations were observed with bridging. CONCLUSION: While associations appeared stronger with bonding and linking, this may reflect a weakness of the measure to fully capture bridging social capital. Even though, this aspect might need strengthening, the WSC showed good metric properties in a different setting, language and occupational group. Cross-national and cognitive validation studies are needed

Muschalla B and Jobges M. Prevalence and characteristics of work anxiety in medical rehabilitation patients: a cross-sectional observation study. Archives of Physical Medicine & Rehabilitation. 2018; 99(1):57-64.

<http://dx.doi.org/10.1016/j.apmr.2017.06.017>

Abstract: OBJECTIVE: To investigate frequency, type, and characteristics of work anxieties in patients with somatic illness. DESIGN: Cross-sectional observation study. SETTING: Neurology, orthopedic, and cardiology rehabilitation clinics. PARTICIPANTS: Patients (N=1610; age, 18-65y) with work anxieties. INTERVENTIONS: Not applicable. MAIN OUTCOME MEASURES: Patients who scored high on at least 2 of 9 items in the work-anxiety screening questionnaire and who reported impairment were investigated with a differential diagnostic interview on work anxieties and with the Mini-International Neuropsychiatric Interview on non-work-related common mental disorders. Patients also filled out a self-rating questionnaire on their subjective symptom load and sociodemographic data. RESULTS: Approximately 20% to 27% of the investigated inpatients in somatic rehabilitation (altogether n=393) received a work-anxiety diagnosis. Patients with orthopedic illness report highest work anxiety and have previous longest sick leave (20.6wk in the past 12mo). Patients with orthopedic illness suffer from work-related adjustment disorder with anxiety, social anxieties, and workplace phobias, whereas patients with cardiac illness are more often affected by hypochondriac anxieties. Anxieties of insufficiency and worrying occur equally in all indications. CONCLUSIONS: About a quarter of patients in somatic rehabilitation are in need of additional diagnostic attention owing to work anxieties. Differential diagnostic of work anxiety is needed for initiating adequate therapeutic action. Somatic rehabilitation physicians should be aware of work anxieties in their patients, especially in patients with orthopedic illness with previous long-term sick leave

O'Donnell JA, Anderson JT, Haas AR, Percy R, Woods ST, Ahn UM, and Ahn NU. Preoperative opioid use is a predictor of poor return to work in workers' compensation patients after lumbar discectomy. Spine. 2018; 43(8):594-602.

<http://dx.doi.org/10.1097/BRS.0000000000002385>

Abstract: **STUDY DESIGN:** A retrospective cohort. **OBJECTIVE:** The aim of this study was to determine the impact of preoperative opioid use in workers' compensation (WC) patients undergoing lumbar discectomy (LD). **SUMMARY OF BACKGROUND DATA:** The prevalence of back pain among opioid users approached 60%. Long-term opioid dependence in spine surgery patients is roughly 20%. Despite pervasive use, there is no evidence to support long-term opioid analgesic use for back pain. **METHODS:** Ten thousand five hundred ninety-two patients received compensation from the Ohio Bureau of Workers' Compensation for a lumbar disc herniation between 2005 and 2012. Patients with spine comorbidities, smoking history, or multilevel surgery were excluded. Preoperatively, 566 patients had no opioid use, 126 had short-term opioid use (STO), 315 had moderate opioid use (MTO), and 279 had long-term opioid use (LTO). The primary outcome was whether subjects returned to work (RTW). **RESULTS:** Seven hundred twelve (55.4%) patients met our RTW criteria. There was a significant difference in RTW rates among the no opioid (64.1%), MTO (52.7%), and LTO (36.9%) populations. Multivariate logistic regression analysis found several covariates to be independent negative predictors of RTW status: preoperative opioid use [$P < 0.01$; odds ratio (OR) = 0.54], time to surgery ($P < 0.01$; OR = 0.98 per month), legal representation ($P < 0.01$; OR = 0.57), and psychiatric comorbidity ($P = 0.02$; OR = 0.36). Patients in the LTO group had higher medical costs ($P < 0.01$), rates of psychiatric comorbidity ($P < 0.01$), incidence of failed back surgery syndrome (FBSS) ($P < 0.01$), and postoperative opioid use ($P < 0.01$) compared with the STO and no opioid groups. **CONCLUSION:** Preoperative opioid use was determined to be a negative predictor of RTW rates after LD in WC patients. In addition, long-term preoperative opioid use was associated with higher medical costs, psychiatric illness, FBSS, and postoperative opioid use. Even a short or moderate course of preoperative opioids was associated with worse outcomes compared with no use. For WC patients undergoing LD, judicious use of preoperative opioid analgesics may improve clinical outcomes and reduce the opioid burden. **LEVEL OF EVIDENCE:** 3

Commentary

Atlas SJ. Point of view: avoiding opioids in patients with work-related lumbar disc herniation. *Spine*. 2018; 43(8):603-604.

<http://dx.doi.org/10.1097/BRS.0000000000002434>

Pereira M, Comans T, Sjogaard G, Straker L, Melloh M, O'Leary S, Chen X, and Johnston V. The impact of workplace ergonomics and neck-specific exercise versus ergonomics and health promotion interventions on office worker productivity: a cluster-randomized trial. *Scandinavian Journal of Work, Environment & Health*. 2018; [Epub ahead of print].

<http://dx.doi.org/10.5271/sjweh.3760>

Abstract: Objectives Using an employer's perspective, this study aimed to compare the immediate and longer-term impact of workplace ergonomics and

neck-specific exercise versus ergonomics and health promotion information on health-related productivity among a general population of office workers and those with neck pain. Methods A prospective one-year cluster randomized trial was conducted. Participants received an individualized workstation ergonomics intervention, combined with 12 weeks of either workplace neck-specific exercises or health promotion information. Health-related productivity at baseline, post-intervention and 12-months was measured with the Health and Work Performance Questionnaire. Intention-to-treat analysis was performed using multilevel mixed models. Results We recruited 763 office workers from 14 organizations and allocated them to 100 clusters. For the general population of office workers, monetized productivity loss at 12 months [AU\$1464 (standard deviation [SD] 1318) versus AU\$1563 (SD=1039); P=0.023]; and presenteeism at 12 months [2.0 (SD 1.2) versus 2.4 (SD 1.4); P=0.007] was lower in the exercise group compared to those in the health promotion information group. For office workers with neck pain, exercise participants had lower sickness absenteeism at 12 months compared to health promotion information participants [0.7 days (SD 1.0) versus 1.4 days (SD 3.1); P=0.012], despite a short-term increase in sickness absenteeism post-intervention compared to baseline for the exercise group [1.2 days (SD 2.2) versus 0.6 days (SD 0.9); P<0.001]. Conclusion A workplace intervention combining ergonomics and neck-specific exercise offers possible benefits for sickness absenteeism and health-related productivity loss among a general population of office workers and sickness absenteeism for office workers with neck pain in the longer-term

Peters CE, Palmer AL, Telfer J, Ge CB, Hall AL, Davies HW, Pahwa M, and Demers PA. Priority setting for occupational cancer prevention. *Safety and Health at Work*. 2018; 9(2):133-139.

<http://dx.doi.org/10.1016/j.shaw.2017.07.005> [open access]

Abstract: Background: Selecting priority occupational carcinogens is important for cancer prevention efforts; however, standardized selection methods are not available. The objective of this paper was to describe the methods used by CAREX Canada in 2015 to establish priorities for preventing occupational cancer, with a focus on exposure estimation and descriptive profiles. Methods: Four criteria were used in an expert assessment process to guide carcinogen prioritization: (1) the likelihood of presence and/or use in Canadian workplaces; (2) toxicity of the substance (strength of evidence for carcinogenicity and other health effects); (3) feasibility of producing a carcinogen profile and/or an occupational estimate; and (4) special interest from the public/scientific community. Carcinogens were ranked as high, medium or low priority based on specific conditions regarding these criteria, and stakeholder input was incorporated. Priorities were set separately for the creation of new carcinogen profiles and for new occupational exposure estimates. Results: Overall, 246 agents were reviewed for inclusion in the occupational priorities list. For carcinogen profile generation, 103 were prioritized (11 high, 33 medium, and 59 low priority), and 36 carcinogens were deemed priorities for occupational

exposure estimation (13 high, 17 medium, and 6 low priority). Conclusion: Prioritizing and ranking occupational carcinogens is required for a variety of purposes, including research, resource allocation at different jurisdictional levels, calculations of occupational cancer burden, and planning of CAREX-type projects in different countries. This paper outlines how this process was achieved in Canada; this may provide a model for other countries and jurisdictions as a part of occupational cancer prevention efforts

Rasmussen CDN, Holtermann A, and Jorgensen MB. Recall bias in low back pain among workers: effects of recall period and individual and work-related factors. Spine. 2018; 43(12):E727-E733.

<http://dx.doi.org/10.1097/BRS.0000000000002457> [open access]

Abstract: STUDY DESIGN: A prospective cohort study. OBJECTIVE: The aim of the present study was first to compare monthly measurements of low back pain (LBP) with quarterly and yearly retrospective measurements of LBP, and second to investigate possible bias effects for recall bias of LBP. SUMMARY OF BACKGROUND DATA: LBP is a subjective experience often measured by a single rating of recalled pain over a certain time interval. However, retrospectively reported pain may be subject to recall bias. METHODS: The agreement between monthly measurements of LBP and quarterly and yearly retrospective measurements of LBP was evaluated by Spearman rank order correlation coefficients, intraclass correlation coefficients, and Bland-Altman plots. Bias effects for recall bias were investigated by a linear regression model. RESULTS: There were no statistical significant differences in mean values of monthly measurements of LBP compared with quarterly and yearly retrospective measurements of LBP on a group level. However, the Bland-Altman plots revealed that within individuals, the difference between monthly measurements of LBP and quarterly and yearly retrospective measurements of LBP was highly variable. For both quarterly and yearly recall, social support from colleagues and average LBP days were significantly associated with the recall bias. CONCLUSION: The agreement of pain recall among workers in the current study seems to be good on a group level, but both between and within individuals, the difference between monthly and quarterly and yearly retrospective measurements was quite high. Factors that impacted the recall bias were social support from colleagues and average LBP days over the recall period. LEVEL OF EVIDENCE: 3

Shandra CL. Disability as inequality: social disparities, health disparities, and participation in daily activities. Social Forces. 2018; 97(1):157-192.

<http://dx.doi.org/10.1093/sf/soy031>

Sun Y, Arning M, Bochmann F, Borger J, and Heitmann T. Development and validation of a practical instrument for injury prevention: the occupational safety and health monitoring and assessment tool (OSH-MAT). Safety and Health at Work. 2018; 9(2):140-143.

<http://dx.doi.org/10.1016/j.shaw.2017.07.006> [open access]

Abstract: Background: The Occupational Safety and Health Monitoring and Assessment Tool (OSH-MAT) is a practical instrument that is currently used in the German woodworking and metalworking industries to monitor safety conditions at workplaces. The 12-item scoring system has three subscales rating technical, organizational, and personnel-related conditions in a company. Each item has a rating value ranging from 1 to 9, with higher values indicating higher standard of safety conditions. Methods: The reliability of this instrument was evaluated in a cross-sectional survey among 128 companies and its validity among 30,514 companies. The inter-rater reliability of the instrument was examined independently and simultaneously by two well-trained safety engineers. Agreement between the double ratings was quantified by the intraclass correlation coefficient and absolute agreement of the rating values. The content validity of the OSH-MAT was evaluated by quantifying the association between OSH-MAT values and 5-year average injury rates by Poisson regression analysis adjusted for the size of the companies and industrial sectors. The construct validity of OSH-MAT was examined by principle component factor analysis. Results: Our analysis indicated good to very good inter-rater reliability (intraclass correlation coefficient = 0.64-0.74) of OSH-MAT values with an absolute agreement of between 72% and 81%. Factor analysis identified three component subscales that met exactly the structure theory of this instrument. The Poisson regression analysis demonstrated a statistically significant exposure-response relationship between OSH-MAT values and the 5-year average injury rates. Conclusion: These analyses indicate that OSH-MAT is a valid and reliable instrument that can be used effectively to monitor safety conditions at workplaces

Verbeek J. Could we have better occupational health guidelines, please? Scandinavian Journal of Work, Environment & Health. 2018; [Epub ahead of print].

<http://dx.doi.org/10.5271/sjweh.3764>

Wang IT, Lee SJ, Bezyak J, Tsai MW, Luo HJ, Wang JR, and Chien M. Factors associated with recommendations for assistive technology devices for persons with mobility limitations using workplace accommodation services. Rehabilitation Counseling Bulletin. 2018; 61(4):228-235.

<http://dx.doi.org/10.1177/0034355217711865>

Wels J. Are there health benefits of being unionized in late career? A longitudinal approach using HRS. American Journal of Industrial Medicine. 2018; [Epub ahead of print].

<http://dx.doi.org/10.1002/ajim.22877>

Abstract: OBJECTIVE: To assess whether unionization prevents deterioration in self-reported health and depressive symptoms in late career transitions. METHODS: Data come from the Health and Retirement Study (N = 6475). The

change in self-perceived health (SPH) and depressive symptoms (CESD) between wave 11 and wave 12 is explained using an interaction effect between change in professional status from wave 10 to wave 11 and unionization in wave 10. RESULTS: The odds of being affected by a negative change in CESD when unionized are lower for unionized workers remaining in full-time job (OR:0.73, CI95%:0.58;0.89), unionized full-time workers moving to part-time work (OR:0.66, CI95%:0.46;0.93) and unionized full-time workers moving to part-retirement (OR:0.40, CI95%:0.34;0.47) compared to non-unionized workers. The same conclusion is made for the change in SPH but with odds ratios closer to 1. CONCLUSION: The reasons for the associations found in this paper need to be explored in further research